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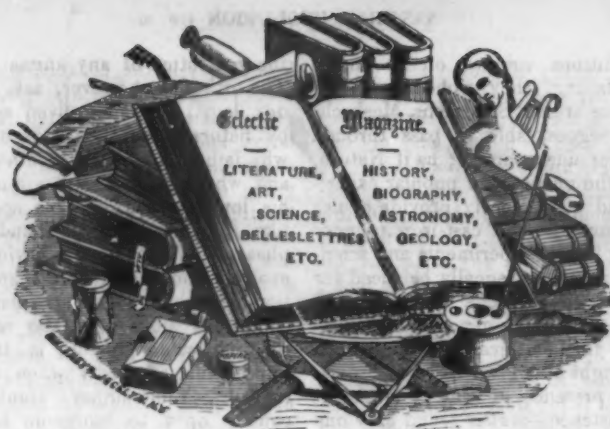
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## FOREIGN LITERATURE, SCIENCE, AND ART.

New Series, }  
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plete in 63 vols.

### A PROBLEM IN MONEY.

BY ROBERT GIFFEN.

IN what way is the ratio of exchange fixed between the precious metals and other commodities? There is a common notion that the function of the precious metals as money involves some peculiar relation between them and commodities in regard to the adjustment of their ratio of exchange. It is said, or assumed, that every portion of the precious metals not wanted for any other purpose, becomes "money;" that the ratio of exchange with other articles rises or falls as there is less or more "money," the fall or rise being proportionate to the change in the quantity of "money;" and that this money use is also so much the preponderant use, that nothing else is material in settling the ratio of exchange between the precious metals and other commodities. It would not be going too far to say that this notion is at the root of the bimetallic theory, so far as bimetallicism is based on any consistent and substantial theory. Supplemented by the

further assumption that gold and silver are not only interchangeable as "money," but that each can be made to take the place of the other, by legislation, at a given ratio, which will continue to operate until one or the other is wholly displaced, what is known as the quantitative theory of money is really the basis of the whole bimetallic structure. Holding myself the view that there is "a" relation between the quantity of the precious metals and prices, I have been frequently claimed by bimetallicists as going a long way with them. I avail myself, therefore, of the present opportunity to give an answer to the question as to how the ratio of exchange between the precious metals and other commodities is fixed. I hold most fully to the view that it is fixed in no other way than is any other ratio, viz. by supply and demand, and by the cost of production of the last margin of supply necessary to meet the last margin of demand. There is "a" relation be-

tween the quantity of money and prices, but it is rather one in which prices assist in determining the quantity of the precious metals to be used as money, and not one in which prices are themselves determined by that quantity. There are some complicated elements in the problem; but this is the substantial result. In no respect, therefore, do I go any way with the bi-metallist, not even the fraction of an inch; and, apart from the interest of the present problem itself, I am the more ready to avail myself of the opportunity of discussing it, because it enables me to explain how different is my own view of the relation between the quantity of money and prices from that quantitative theory of money which, with its supplement as above described, is the foundation of the bi-metallic theory itself.

The precious metals, it is admitted on all sides, have an extensive non-monetary use. They are merchandise as well as money. But few people perhaps realize that probably this non-monetary use is *preponderant* over the monetary use itself. The assumption to the contrary is, in fact, made by bi-metallists and others as if there could be no question of it. The vast stores of coin in existence and circulating in people's hands are pointed to, and the use being assumed to be entirely "monetary," this monetary use is considered to be overwhelming. What is the annual production, it is said, of the precious metals as compared with the enormous mass of money?

But the mass of the precious metals in an uncoined form must be enormous. In the form of plate and ornaments there is endless gold and silver. The belief to the contrary appears to be due to an impression that only a small proportion of the wealth of modern societies is in plate and ornaments—that the days when people kept their wealth in this form are past. What seems to be forgotten is that the wealth of modern societies is itself such that while the proportion of that wealth kept in plate and ornaments is indefinitely less than it was, yet the amount so kept may be large in proportion to the amount of the precious metals themselves. The two proportions are entirely distinct and unconnected. If, however, it is considered for a moment how indestructible are articles composed of the precious metals,

how steady is the conversion of the precious metals into such forms, though the amount annually converted may not be large, and for how many centuries the accumulation of objects of value has been going on, it will be seen that in most of the rich countries of the world the plate and ornaments must be a large mass. It is a moderate estimate that in this country alone—in plate, in watches, in jewelry and ornaments—there cannot be less than 50,000,000*l.* worth of gold, which represents no more than an accumulation of half a million per annum for a century, not to speak of the older accumulations at all. There is probably an equal amount of silver, though the fashion of solid silver plate has for many years died out. In England, then, the stock of gold held for non-monetary uses is probably not far short of, if not equal to, the stock held for monetary uses, which is probably little more than about 60,000,000*l.* The stock of silver, again, in England held for non-monetary uses must be two or three times the stock of silver money, which is little over 20,000,000*l.* This is not a statistical paper, but the figures may illustrate what the facts are throughout the rest of the civilized and semi-civilized world, where greater taste for ornaments may compensate to some extent the smaller wealth of the people compared with England. It is enough for the present purpose to indicate that there must be an enormous mass of gold and silver in existence and used for non-monetary purposes.

The demand for non-monetary purposes on the annual production is also preponderant in the case of gold, and very large in the case of silver. About two-thirds of the gold annually produced is taken for the arts; and if the consumption of India is included, as being either for simple hoarding, or for the arts, and in no case for the purpose of circulating money, then the demand for gold for non-monetary purposes appears almost equal to the entire annual production. The normal demand for money proper it is almost impossible to state, owing to the amount of recoinage and other difficulties; but it may be doubted whether the annual addition to circulating gold money in normal years can be anything nearly so great. Of silver, apart from India, about a fourth or fifth of the annual production is consumed in the arts; but if the Indian consumption

is included, as being mostly of a non-monetary kind, about half the annual production of silver may be considered as required for non-monetary uses. Not only, therefore, is the non-monetary stock of the precious metals enormous, but the preponderating demands falling on the annual production are also non-monetary.

And both as regards this mass of the precious metals in existence not used as money, and the demands on the annual production for non-monetary uses, the same conditions as to the ratio of exchange of the metals with other articles must exist, as exist for those other articles themselves in their exchanges with each other, unless in the case of gold and silver their use as money should alter the conditions. The proposition is self-evident. The precious metals, so far, are ordinary merchandise and nothing more.

What I have next to point out is that as regards even the monetary uses of the precious metals, there are different uses. There is "money" and "money." The precious metals, when used for one kind of monetary purpose, may remain obviously under the ordinary conditions of merchandise, although not obviously so when used for another kind of monetary purpose. It is convenient in any case to make distinctions, and to look at the matter in detail instead of speaking of the monetary use in a vague and general way.

Three principal kinds of employment of the precious metals for monetary purposes are apparently to be distinguished: 1. They are employed for token or *quasi*-token coinage, *i.e.* for the retail payments of society. 2. They are employed as reserves in banks, or other hands, forming the guarantee of paper money and checks, and thus becoming the instrument of the wholesale payments of society. With this employment may be included the use of the precious metals as an instrument of international remittance. 3. They are used as a means of hoarding. Only the first two of these employments can be spoken of, I believe, as a proper monetary employment. At any rate, although the precious metals, when hoarded, whether in coin or in bullion, may be considered as potential money, they are clearly not money in circulation, and a distinction must be made between the use for money in circulation and the use for hoarding.

We may begin with the hoarding use.

When in demand for hoarding, the precious metals, although they may be in the form of coin, remain mere merchandise. They are subject to the same laws respecting their ratio of exchange as diamonds, valuable pictures, or any other valuable object which may be hoarded. The motives of hoarding, and the price to be paid "in meal or in malt" for the hoards, determine the demand; and the price to be obtained, which acts upon both the existing hoards as well as upon the annual production, when any new hoard is in question, determines the supply. The possibility of using the hoards as money, especially when in the form of coin, may be an element in their value; but it is only one element out of many, and for this purpose, accordingly, the precious metals are practically merchandise only.

Equally with the stock of the precious metals for purely non-monetary uses, the stocks of the precious metals hoarded are very large. The military and *quasi*-military chests of military Governments like France, Germany, and Russia: the accumulations of the precious metals in those countries, far beyond any strict requirement of monetary circulation: are enormous. The United States, again, has accumulated both gold and silver in its Government vaults far beyond any ordinary monetary necessity. There are large private hoards besides all over the world, but especially in India, where both gold and silver are largely hoarded. Whatever the motives may be which determine these hoards, the hoards themselves are not money in circulation in any form, and the demand to replenish them is not a demand for "money," and the supply of these demands is not a supply of "money," which can help to make any such relation between the quantity of money and prices as the quantitative theory of money, and with it the bimetallic theory, assume.

It is further to be noted that it is practically impossible to distinguish between the quantities of the precious metals simply hoarded and the stock in the form of ornaments, where they serve another purpose as well as hoarding. In India especially it is well known the ornaments are a reserve, and are if necessary melted down. But in all cases the possibility of melting exists.

In this way, then, the use of hoarding,

which is in one sense a monetary use of the precious metals, is to be included, for the purposes of the present discussion, in the category of merchandise uses where gold and silver are subject to the same conditions as regards their ratio of exchange with other articles as are those other articles themselves.

We come then to the more special monetary uses of the precious metals as above defined. And here again we find that as regards the most important of these in respect of quantity, viz. the use of the precious metals as token money, or quasi-token money, the demand for them must also be viewed as an ordinary merchandise demand. The point is so important as to excuse a somewhat full exposition.

As regards all kinds of token money, then, I have to put forward the proposition that the general economic circumstances of a community of which the range of prices of staple articles is an important part, but still only a part, determine in ordinary circumstances the quantity of the precious metals used as money in circulation in that form. The range of incomes seems even more important in this connection than prices ordinarily so called; but the two are interconnected, and incomes are a part of "prices," using the word in its most general sense. Further, the quantities of the different kinds of the precious metals so used as money may be considered as a fixed amount of each kind per head of the population, or rather an amount oscillating between fixed limits according to the seasons and the ebb and flow of credit. The amounts at any rate do not vary proportionately with small or ordinary fluctuations of prices, though they are liable to great changes with changes of magnitude in economic circumstances, including, in such changes of magnitude, great changes in the range of incomes and the range of prices of staple commodities.

Take first the case of copper or nickel money, which is all the better for illustration because copper and nickel, though used for token money, are not precious metals. Apparently, then, for a community of given numbers in a certain state of civilization and economic development, only a definite amount of such small money is required, whatever the range of prices may be. The same (or nearly the same) copper money will do the work

which copper has to do in such a community at almost any range of prices. The statistics of copper coinage show that it is a machine whose size is increased automatically as population increases—more rapidly, perhaps, in good times (when prices rise) than in bad times (when prices fall), but not in such a way at any time as to make any proportion between the changes in quantity and the changes in prices.

What is true of copper money is true of silver money in a country like England. This money being wanted for small change, the quantity in use varies only as copper money does, and from similar causes. The determining factor is a custom and habit of the people, which requires so much silver money per head. At a point, no doubt, silver might tend to go out of use, and copper come in on the one side in place of it, and gold on the other; but the limits of change are apparently very wide.

*Mutatis mutandis*, it is obvious, the same remarks must apply to that part of the gold money in a country like England which is either explicitly token money or which, though standard money and unlimited legal tender, is really used as a kind of small change only—that is, the whole stock of gold coin in a country like England which is neither held as reserve in the Bank of England nor hoarded, the banking system reducing the uses of gold coin in circulation to those really of small change only. The amount of such small change must be viewed as strictly regulated by the habits and customs of the people, remaining at the same chronic amount with given habits and customs, and not changing—or, at any rate, not changing greatly—according to the ordinary fluctuations of prices.

The point when stated is so obvious as to seem hardly worth laboring; but it may be pointed out that the analogy of the circulation of paper money of small denominations in a country where the quantities of such paper in circulation are exactly ascertainable, quite supports the conclusion, although so little is known of the circulation of gold itself that it cannot be directly proved. The paper (and this is true of inconvertible as well as convertible paper) is very nearly a fixed quantity per head in such countries, or rather a quantity varying between fixed points ac-

according to the seasons, and it hardly seems to vary with prices within very wide limits indeed. Even when it seems to vary with prices a little, the variation in the demand for the precious metals that would arise on similar changes occurring in the requirements of those metals for small change would be extremely small in proportion to the volume of the metals used for monetary purposes generally, and still more in proportion to the volume of the metals in use for all purposes.

Of gold, therefore, as token and quasi-token money, as for silver and copper, it may be said that the quantity is a comparatively fixed amount—an amount at any rate not varying with small changes in the range of prices of staple articles, and never changing proportionately.

The same remarks would of course be true of silver, when it is the unlimited legal tender and standard money of a country, as regards that portion of the so-called standard money which is really used as small change. The nature of the use has to be considered rather than the nominal character of the coinage.

We have still, then, only "merchandise" to deal with as regards this important monetary use of the precious metals—a more important use, in respect of quantity, it may be noticed, than the use of the metals as reserves, although in another respect the use as reserves is the most important by far of the monetary uses. It is by the reserves that wholesale payments are made, and the money so used must possess by law or custom the quality of standard and unlimited legal tender, but the quantity of the precious metals required for this purpose is not large in amount in comparison with the quantity used for small change.

Coming finally, however, to the use of the precious metals as reserves, we find that here again the demand for the precious metals is usually a demand for a fixed quantity, or rather a quantity varying between fixed points, dependent on the habits and customs of a commercial community in given economic circumstances among which the range of prices is only one of the factors. It is not a demand which varies materially or sensibly with ordinary fluctuations of prices. As I have elsewhere explained, the reserve has great regulating power, and the changes in it and its normal amount may be significant of

contraction or expansion of standard money, or rather the material, whether gold or silver, of which it is made. But the variations cannot alter seriously the demands upon the precious metals themselves. The highest reserve in the Bank of England for many years has been little over 18,000,000*l.*, while the more usual fluctuations have been between 10,000,000*l.* and 15,000,000*l.*

In speaking of banking reserves, I have had England mainly in view, as almost the only great country with a genuinely automatic money market. In other countries, such as France, Germany, and the United States, the so-called reserves are rather hoards than reserves—potential money, not actual money, to which therefore the same rules would not apply; but wherever the function of a reserve exists, its tendency to be a fixed quantity, or a quantity oscillating between fixed points, and oscillating without any special reference to the usual fluctuations in prices, is manifest.

What is true of reserves so-called seems also true of that portion of the money used as a guarantee of wholesale payments which is remitted to and fro, and is at one time part of the reserve in England, at another part of the reserve in France, and so on. The whole reserves and precious metals in course of remittance in the civilized world may be considered a single fund which varies even less as a whole than the particular parts of it in individual countries.

To conclude, then: the demands for the precious metals as reserves, like the demand for them for other monetary purposes, is thus, in fact, a demand for them as merchandise; and in all respects accordingly the precious metals are merchandise only. It is undeniably so as regards their non-monetary uses, which are the most important in amount. It is equally so as regards the quasi-monetary but really merchandise use of hoarding, the next important in amount; equally so as regards the use for token money or small change, which comes next; and equally so as regards the use for "reserves," which comes last in amount and is really very unimportant in that respect. In effect, then, the ratio of exchange between gold and silver and other articles can be fixed in no other way and by no other influences than those which affect those articles. There is absolutely no

difference in gold and silver from any other merchandise, and the theories which presuppose some special and peculiar difference, because the precious metals are used for money, is a palpable delusion. It has no foundation in the actual facts of the uses of the precious metals.

We may go a little farther and affirm that, so far from the money demand proper being the regulating demand, in the adjustment of ratios between the precious metals and other commodities, that money demand can hardly ever be the regulator. The reason is that it is a demand, as we have seen, mostly for a fixed amount of the precious metals, and it is a demand at the same time of a very imperative kind, which will be satisfied at almost any ratio of exchange with other commodities, because money serves a great necessity, and the amount required is at the same time so small in proportion to the wealth of modern societies that the price paid for it is unfelt. The money demand, therefore, can hardly ever be that last margin of demand to which the last margin of supply is adjusted, and by which the ratio of exchange between the precious metals and other articles will be finally settled. Gold and silver, therefore, while used as money, are not only merchandise, but the regulator of the ratio between them and other articles must almost necessarily be some other than the money use.

What becomes then of the theory which I admit to be true, that there is "a" relation between the quantity of money and prices? The quantitative theory of money, which proceeds on the assumption that there is a pool of money into which a balance of the precious metals falls after other uses have been satisfied, and that prices rise or fall proportionately with an increase or diminution of the pool, is obviously not true; but it does not follow that there is no relation between money and prices.

A relation of some kind then is established by the fact that the consumption of the precious metals for money, as for other purposes, must tend to increase, other things being equal, when they are relatively cheap, and to diminish when they are relatively dear. I do not believe that the consequent variation in ordinary circumstances can be very great as regards

the use of precious metals for money, because the money demand is itself so imperative; but there is probably some variation. There is nothing special, however, in this variation to take away from the precious metals their quality of merchandise.

Again, while the quantities of the precious metals used as money are usually of fixed amount, given a certain economic condition, and customs and legislation of a certain kind, yet in extraordinary circumstances—that is, on great changes of prices or other economic conditions occurring—the quantity of different sorts of the precious metals required for money use may be greatly changed. A country rising in the economic rank advances from the use of copper or nickel mainly to a larger use of silver; from silver in the same way to gold; and from both silver and gold to paper and other substitutes for metallic money. With prices and incomes in England and other civilized countries a tenth of what they are now, there could hardly be the same use for gold that there is, and perhaps not even for silver. Always, however, the metals remain merchandise, and it is the prices which determine, or help to determine, the quantity of them to be used as money, not the money the prices.

I have explained elsewhere in what way probably the abundance or scarcity of the precious metals may involve a fall or rise in the ratio of their exchange with other articles, and may be associated with changes in the quantity of money used.\* In times of good credit, if the precious metals happen to be abundant and easily procurable, the tendency will be for the reserves of money to accumulate more rapidly than at other times, and for prices to rise more than they would otherwise do, until reaction sets in. In times of bad credit the reserves would begin to accumulate sooner after the crash, and the fall of prices would also be arrested sooner than would otherwise be the case. But the precise mode in which a change in the quantity of money used is brought about is, of course, only a detail. The essential point is that it takes a catastrophic change in prices, or in some other economic conditions, to make any sensible change in

\* See *Gold Supply; Rate of Discount and Prices. Essays in Finance*, 2nd series.

that quantity, and always it is the change of prices or other change in economic conditions which affects the quantity of money used, and not the money the prices. The merchandise quality of the precious metals remains entirely unaffected.

In these ways then, although the quantitative theory of money as above stated is not true, it is still true that money and prices are related. But the relation is of an entirely different nature from that of proportional quantity, and is based on the fact that the precious metals when used as money are merchandise still, and have their ratios of exchange with other articles fixed in no other way than any other merchandise.

It may be admitted, however, that the function of the precious metals as money affects the ratio at which they exchange with other commodities in *one* very special manner, differently from anything which is observable as regards any other commodities. There is an oscillation of the prices of staple commodities due to the ebb and flow of credit, and the effect is, that any commodity used as money falls in exchangeable value when credit becomes good, and rises when credit becomes bad, although if it were not used as money, and some other commodity were so used, it would probably move in the opposite direction along with the commodities. But these oscillations must be confined within the most narrow limits. The chronic ratio of exchange between the precious metals and other commodities is not concerned. To the extent that a ratio is established different from what the chronic ratio tends to be, causes are set in operation which operate to restore the equilibrium.

But allowing for such oscillations and exceptions, which are most slight after all, the chronic ratios of exchange between gold and silver and other commodities are not determined by any special qualities these metals have as money. It is the range of prices as part of a general economic condition which helps to determine the quantity of money in use, and not the quantity of money in use which determines the prices.

Having answered the main question with which I started, I might stop at this point; but it may be useful to go on and

answer a connected question, which belongs to the supplementary hypothesis of the bimetallic theory. Not only is a pool of money assumed by the theory, and a rise or fall of prices with the increase or diminution of the pool, but gold and silver, as forming the pool, are assumed to be interchangeable, so that the one can displace the other. There is no such pool, as we have seen, and that might be the end of the question; but neither is there any such interchangeability between gold and silver as is supposed.

Take the case of token money. Copper, it is clear, supplies one want; silver another; gold another. A community requiring actual metallic money for certain classes of payments must have either gold or silver, or an inferior metal, according to its special wants. It has no choice in the matter at all.

The fact that either one or the other metal may be dispensed with in actual circulation by the substitution of paper does not alter the fact that, if the demand is for metallic currency at all in actual circulation, it must be for the metal which can perform the desired work. The metals in this respect are not interchangeable.

The want of interchangeability is not so evident when the precious metals are used as reserves in banks and other hands as the basis of wholesale payments, but it seems evident that even here gold is the more convenient metal for advanced communities, as the more easily handled, and as the most convenient for remittances over great distances. There is no complete interchangeability between it and silver. In any case it is an absolutely unavoidable necessity for communities, by legislation or custom, to select one or the other metal for its unlimited legal tender, which accordingly will be the metal in which reserves will be held. Where a community, following the ancient practice, which prevailed before good token money was invented, tries to keep both gold and silver in circulation as unlimited legal tender by a dual legal tender law, and endeavors to carry out the law, that metal which exchanges for the other at a less price than the legal ratio,—which is overvalued by the legal ratio, as the phrase is,—will be used exclusively for the purpose of unlimited legal tender, and the demand for it will be the same as if it

were the single unlimited legal tender of that country. There can be no interchangeability in practice between the two metals.\*

There is also a complete difference between the two metals in regard to the objects for which they are hoarded and the circumstances under which they are hoarded. One community hoards gold, another silver, another both in uncertain proportions. Governments hoard both, from a variety of motives, but preferably gold for military purposes. While hoarding, therefore, is a most variable demand, there is hoarding and hoarding, and the one metal cannot take the place of the other for this purpose.

Accordingly gold and silver are not only in no special relation to commodities as money, causing the ratio between them and commodities to be fixed in a different way than the ratios among commodities themselves, viz., by supply and demand and cost of production; but as money they perform different functions, and they are never interchangeable, or at most very partially so. The supplementary bimetallic hypothesis is then as unfounded as the primary hypothesis that there is a margin of the precious metals after all their other

uses, which becomes available for money, and that prices rise or fall according to the size of the margin. There is not only no such margin as is imagined, the money use being rather the first use; but if there were, gold and silver could not take each other's place in the margin. When used for money they are really used each in a special way, and not in such a way that the one can take the place of the other.

The conclusion being so clear, one may well wonder how a theory so baseless came to be formed. I am not sure that I have been able to get together the whole history; but some points seem clear and instructive. After so much bimetallic clamor as we have had, sober men may be interested to see how overwhelming is the economic opinion against the bimetalist, and how little claim bimetalism has to be a competing monetary theory with monometallism.

The great English authorities on currency, including some of the greatest names in economics—Locke, Harris, Lord Liverpool, Adam Smith, Ricardo—were not aware of the peculiar theory which bimetalists advocate, and took for granted that the ratio between the precious metals and other commodities was settled, as all other exchange ratios are settled, by supply and demand, bidding of the market, and cost of production. There is not one syllable in their writings to imply any other theory. Upon this Locke based his mathematical demonstration, universally accepted last century, that there could not be two standard metals, because the articles being different the two could not remain for any length of time at any given ratio, but the ratio would necessarily change.

Hence Locke recommended that only one should be standard, and that the other should be used in payments at a ratio—to be fixed by the market from time to time. Harris and other authorities preferred that Government should fix a ratio which would be followed in Government transactions, and probably largely in other transactions; but they equally contemplated that the ratio would require changing from time to time according to the market. The idea that the Government by its action in coining, in accordance with some special property of money, would cause gold and silver to interchange with each other at the Government ratio until one or other was wholly displaced, did not then exist. No

\* This was the doctrine of Locke and the English economists, and it impresses me the more, the more I have studied the subject. The experience of France between 1803 and 1873 is often referred to as showing that the two metals can circulate side by side as full legal tender. But having considered all the facts carefully, I find they are entirely such as to confirm the older economists. France never had both metals in use at the same time as full legal tender and standard money. The two metals were always in use as different kinds of token money or quasi-token money; but the full legal tender was practically for one period, 1803-50, silver only, and for another period, 1850-73, gold only. Gold and silver were never both used as unlimited legal tender together. Gold and silver coins might have been so used as monopoly coins, as silver coins are now used in France, without infringing the principle laid down by the older economists, which was absolutely true. What they spoke of as being incapable of circulating together was the metals, or coins made of them without any seigniorage; coins on which a seigniorage had been charged, or which had become degraded by use, might so circulate for a time until the ratio between the metals changed to such an extent as to permit of the one or the other sort of coin being melted. But such a limited circulation of monopoly coins does not show that the metals themselves could circulate together at a ratio.

such property in gold and silver as money had been observed by those great authorities, although all countries had ratios, and there were even proposals as early as the seventeenth century for a universal common ratio.

In truth, so little suspicion was there of any such theory that it is quite certain the coining of both gold and silver, and their acceptance by governments at a ratio, originated, and was continued, on considerations of practical convenience only. Gold was the most convenient metal for the larger payments; silver for the smaller. Both had to be coined because there were different classes of payments. When Lord Liverpool, following Adam Smith, suggested and elaborated a plan for token money, by which the metal which was not the standard could be brought into use for the special payments for which it was convenient, without the special risk of melting down to which the undervalued metal in a bimetallic *régime* was exposed, then it was felt by all the authorities that the problem of metallic money had been solved. One metal was to be the standard, and the other was to be related to the standard in such a way that, while it could be used conveniently, the risk of melting it down would be enormously lessened.

This universal consensus of opinion last century was manifested, not only in England but in other countries.

In the United States coins of both gold and silver were introduced after the Declaration of Independence, on a bimetallic basis, but without the hint of an argument that the ratio would exist permanently, or that the action of the Government would tend to fix it. The whole object was to get both metals into use, having regard to the special payments for which they were adapted—to effect the objects which are now effected by standard and token money together. Lord Liverpool's scheme of token money came later, and was not before the American authorities. But there is not a glimmering, in all the American writing, as far as I have observed, of the peculiar monetary theory on which bimetalism is now based.

The same may be said of the French legislation at the beginning of the present century. Indeed, in the discussions which preceded the great French law of 1803, the authority of Locke and Newton was recognized; and, in coining both gold and

silver, the French law declared silver alone to be the standard, the coinage of the other metal being only recognized in payments at a ratio. In the original draft of the law it was provided that when the ratio had to be changed, only the gold should be recoinced; but, although this provision was subsequently omitted, it was from no anticipation that a change in the ratio was practically out of the question, or that the law itself would tend to maintain the ratio. There is not a syllable to that effect in the whole debate, nor a whisper of that monetary theory on which bimetalism is based.

The French Legislature had not Lord Liverpool's plan of a token money before them. The legislation of 1803 in France preceded the famous treatise on the coins of the realm. It is too much to assume that so novel a plan would have been accepted in France if it had been before the authorities at the time; but the acceptance of it would have been quite in accordance with all the practical considerations stated in the debate in favor of the coinage of both gold and silver.

As late as 1816, when the single gold standard was formally adopted in England, and the coinage of silver as token money only was resolved on, there is still no hint of the peculiar bimetallic theory. The single standard was adopted unanimously and cordially, as a thing about which there could be no question. Mr. Wellesley Pole (Master of the Mint), in proposing it, made the following declaration, which it may be useful to quote textually as showing, in conjunction with the unanimous acceptance of the proposal, the strength of the authorities—as matters stood at the beginning of the century—against the possibility of a fixed ratio:—

When the committee took into their consideration this short view of the history of our circulation, he believed he should be anticipated in his opinion that it could not be expedient to allow the coins of both the precious metals to be equally legal tender and standard money of the country to an unlimited extent. It had been the opinion of, he believed, all the eminent men who had written upon the subject, that there should be but one standard measure of value. Sir William Petty, Mr. Locke, and Mr. Harris upon this point had all concurred. Mr. Locke says that money, as the measure of commerce, ought to be kept as steadily and invariably as may be; but this cannot be if your money be made of two metals, whose proportion, and consequently whose price, constantly varies in respect to one another. Sir William Petty

declares there can be but one of the two precious metals of gold and silver fit to be a matter of money. Mr. Harris observes, that only one of these metals can be the money or standard measure of commerce in any country. In later times, after a further experience of the evils arising from the collision of two standards, from the competition raised between the coins of the two precious metals, these opinions had been strengthened by the writings of Mr. Alcorne and Dr. Adam Smith, the late Lord Liverpool, and lastly by the report of the bullion committee. All these authorities had agreed that the standard measure of value, the standard coin of the realm, should be composed only of one of the precious metals. He believed, therefore, that it would be universally admitted that there should be but one standard coin of the realm, to be at once the measure and equivalent of property.\*

So strong and so unanimous was opinion down to 1816 and afterward against the possibility of a fixed ratio between gold and silver. Voices were indeed raised in favor of silver rather than gold as the single standard (which all were agreed on), but not strong voices. The only spokesman for this view in the debates was the Earl of Lauderdale. Ricardo, a greater authority, was predisposed in favor of a silver standard; but before the resumption of specie payments in 1820, he intimated his adhesion to gold as the single standard, partly on the ground of an anticipated fall of silver. Opinion, however, was quite unanimous, on the passage of the Bill of 1816, in favor of a single standard—so unanimous, indeed, that the possibility of what is now known as the bimetallic theory does not seem to have been dreamt of.

Of course, no question can be settled by authority. Locke, and Adam Smith, and Ricardo, and many more, may all have been in error, and blind not to discover the special nature of money which made a fixed ratio possible. But, in addition to the usual reasons for respecting authority, we must recollect that in this matter the great authorities of last century and the beginning of the present century were dealing with the subject as one of urgent business—Locke, Newton, Harris, Lord Liverpool, as part of their official duty—and that the subject was looked at by them in all its aspects, and keenly studied.

When and in what circumstances the opposite bimetallic theory grew up, who were its discoverers and exponents, what they knew of the previous inquiries and discussions—become, in these circumstances, matters of interest. If the new theory is a respectable one, we should expect to find an intellectual continuity in the discussions, and that the errors of authorities like Locke, Adam Smith, and Ricardo are carefully analyzed and exposed, and the facts supporting the new theory (which these authorities had passed over) explained.

When we proceed farther, however, we find that the idea of a fixed ratio being made by the legal ratio had an almost accidental origin, and was not based on any refutation—and not even on a discussion—of the views of the great authorities who had previously discussed the subject. The bimetallic theory, in fact, had its origin in a mere blunder—a misinterpretation of certain facts as to the common use of gold and silver in France under a bimetallic régime, and the invention of a theory to suit these misinterpreted facts by authors who, to all appearance, were totally unacquainted with the previous discussions. Shortly after 1820, travellers to France, and those acquainted with it, remarked that gold and silver "coins" were circulating together freely, and it seemed to them that practically the expedient of token money as in England was uncalled for, and it would be more convenient that the French plan should be followed, so that both countries should have the same system. This was the view of Mr. Baring (afterward Lord Ashburton), who seems, however, to have stood alone in England, and not to have invented any elaborate theory. By Siamondi, however, who appears to have written at the same time, the theory is set out in pretty much the language used above, the real reason for the circulation of gold and silver coins together at the time being entirely overlooked. His observation was that gold and silver, under a bimetallic law, not only pass at the legal ratio, but are used, for the most part, for purposes which make it indifferent whether gold or silver is used, and only partially for special purposes where they cannot be used interchangeably. Siamondi states expressly that he considers, as regards seven-eighths of their quantity, gold and silver coins are used

\* *Debate on Silver Coinage*: extract from speech by Mr. Wellesley Pole on the 30th of May, 1816. From *Hansard's Parliamentary Debates*, vol. xxxiv. 1816, col. 946.

interchangeably, and only the remaining eighth for special purposes. Hence his argument (the first I know of expressing the "scientific" theory, as it is called, of bimetallism) that there is a certain play between gold and silver used as money, the one taking the place of the other up to a point—though he admitted quite explicitly that the ratio might not be permanent, and that the persistence of an agio for one or the other metal would be a warning to the legislator of the necessity for changing the ratio.

Such is the origin of the theory of a fixed ratio as far as I have been able to trace it. Whether Sismondi borrowed from anybody else I do not know, nor how far our modern bimetallicists have borrowed directly, or at second-hand only, from Sismondi, but there appears to be no complete exposition of the new theory to be compared with the older treatises in which the great authorities have explained the impossibility of a double standard. It is always the Sismondi theory one runs against, and this theory, let me again repeat, is the theory of a writer who does not seem to have studied the subject; who makes no reference to Locke, or Adam Smith, or Lord Liverpool, or Ricardo; and who writes, it must be added, in rather a slipshod manner.

Sismondi, however, being the root-authority, it may be interesting to quote his *ipsissima verba*, as we shall then have the bimetallic theory in its pristine simplicity before us:—

Si le gouvernement fait choix d'un seul métal pour étalon, et s'il déclare que l'autre est marchandise, comme on l'a fait ou proposé à plusieurs reprises, cet étalon se trouvera affecté par toutes les variations annuelles du produit des mines. Si, au contraire, il adopte et légalise la proportion qui lui paraîtra dominante dans le commerce du monde, par exemple, aujourd'hui, celle de quinze pour un; s'il déclare que toute dette d'une once d'or pourra être légitimement payée avec quinze onces d'argent, et réciproquement, ainsi que cela se pratique en France, la mesure commune du commerce ne s'établira pas sur la quantité annuelle produite par les mines d'or ou par celles d'argent, mais sur une moyenne proportionnelle entre les variations que subiront ces deux quantités, et l'étalon désiré en acquerra plus de fixité.

En effet, il paraît que la circulation s'accomplit également sans inconvénient, soit qu'un quart, un huitième peut-être, du numéraire soit en or, et tout le reste en argent, soit, au contraire, qu'un quart ou un huitième soit en argent, et tout le reste en or. Tant que la

proportion entre ces deux métaux ne dépassera ces limites si éloignées, la Monnaie frappera indifféremment ou de l'or ou de l'argent, selon que le prix des lingots de l'un ou de l'autre lui offrira plus de profit, et qu'elle pourra les acheter à meilleur marché; mais, si la disproportion devenait telle qu'on ne trouvât ou plus d'argent pour les appoints, ou plus d'or pour les voyageurs, le commerce offrirait un agio pour l'une ou pour l'autre espèce de numéraire, comme il en offre un assez généralement pour l'or en Italie; et par sa persistance à offrir cet agio, il avertirait le gouvernement qu'il est temps de changer la proportion légale, et de se conformer à celle qu'établirait le profit comparé des mines.\*

To quote this passage is to my mind to show the absurdity of the pretensions of the modern bimetallicist. Not only does Sismondi introduce the subject as if it had never been discussed before him, and ignore the theory, deduced from long experience, upon which the English people, at the very time he was writing (1820), had just established their monetary system; but his cardinal observation, upon which the theory is based, as to a fourth or an eighth part only of gold and silver money being required for the special uses of those metals, and the remainder being required for purposes for which the other metal is equally serviceable, is entirely unsupported by evidence, or reference to any evidence. It is palpably untrue, and if it was true in 1820 in any degree it is completely untrue now in every civilized country. Sismondi's assumption that the metals would tend to exchange at the legal ratio is equally unsupported by evidence, whereas it not only requires evidence, but it was the unbroken experience of centuries when Locke took up the question, as it has been the experience ever since, that side by side with the legal ratio there is immediately a market ratio, and there is no discernible tendency for the former to govern the latter. The foundation of the bimetallic idea is thus rotten from the beginning, and there is no discoverer or great economist to set against the chain of authorities by whom the opposite system has been established.

It is important to notice, moreover, that Sismondi does not indorse the quantitative theory of money itself. What the play is to be between gold and silver, as he sets it out, is by no means clearly expressed.

\* Sismondi, *Nouveaux principes d'économie politique*, tome ii. pp. 59-60, seconde édition. Paris, 1828.

That they are to constitute a pool into which both are to fall, the one taking the place of the other, is assumed; but he does not assert that prices are to be proportionate to the size of this pool, only that they are to be dependent on the cost of producing both gold and silver, instead of the cost of one only. It is a significant difference, also, between Sismondi and his followers, that even he does not anticipate the indefinite continuance of any ratio, but points to circumstances in which the ratio may have to be changed, while the choice of the ratio to begin with is to be a "dominant" ratio, whatever that may mean. It was reserved to more recent and popular enthusiasts to preach the unchangeability of the ratio.

Sismondi, however, is obviously no authority on this question, not having studied it at all. Note, for instance, that he speaks of the ratio at the time he wrote as 15 to 1, whereas the famous 15½ to 1 was "established" in 1803, and had thus been nearly twenty years in existence when Sismondi published his book. The error was retained in the second edition, published in 1828.

Such as he is, however, Sismondi is not only the original but he is still the leading authority, as far as I know, for the bimetallic view, and I know of no fuller exposition of the theory of a fixed ratio, which appears simply to have grown like a fungus assimilating any other theory which happened to be handy, as it has done with the quantitative theory of money. Not only are there no exponents of the bimetallic theory to set against the exponents of the monometallic theory, which has a greater array of economic authority on its side than almost any other conclusion which can be named, but there is no consistent exposition of principles and facts anywhere which can be appealed to at all by the bimetallic rank and file.

There is nothing, therefore, in the genesis and development of the bimetallic theory of a pool of money and an interchange between gold and silver to entitle it to any respect. The theory is itself rotten throughout, as we have seen, and it is of bastard origin altogether. It is not in the line of economic tradition at all, paving the way for something better, as a first hypothesis to explain difficult facts, and useful therefore, notwithstanding errors, in the historical study of the subject. It comes, on

the contrary, after a true and sufficient theory had been expounded by the greatest authorities, on which the student must still fall back, passing over altogether the bimetallic theorists, who have only interrupted and obstructed the study.

The general conclusions arrived at may now be very shortly repeated. The precious metals all through, whether used for monetary purposes or not, are merchandise, and the ratio at which they exchange with other articles is determined in precisely the same way as the ratio between any other commodities—as the ratio, for instance, between copper and wheat, or between beef and shoes. The uses of gold and silver for non-monetary purposes are also much greater than is commonly supposed, so that their money use is not preponderant; but in any case their use for monetary purposes does not create conditions for regulating the ratio of their exchange with other articles different from those which exist for other commodities themselves. The relation of quantity between money and prices is again a relation in which the determining factor is the prices which contribute to fix the quantity of money to be used and which are not in ordinary circumstances fixed by it. The use of the precious metals as money is not unimportant with reference to the ratio at which they exchange with other articles, because the demand for money uses enters into the whole demand. But it does not alter the character of the precious metals as merchandise. Further, even when used for monetary purposes, gold and silver are different articles, and there is very little, almost no interchangeability between them: the one cannot take the place of the other. Apart then from other objections to the bimetallic theory, it is found to be based upon a thorough misconception of the relations between the precious metals and other commodities and the way in which a ratio is established between them, and as to the degree of interchangeability between the precious metals themselves. The theory presupposes, first, that there is an immense balance of the precious metals, the greater part of them, left over after non-monetary uses, and that prices rise or fall according as this balance increases or diminishes; and, next, that gold and silver, as forming this balance, are interchangeable with each

other at any ratio Governments may fix ; whereas, in point of fact, the demand for the precious metals as money in various forms is one of the most imperative and first to be supplied, and is also, if we exclude the hoards as not properly money, a comparatively small demand ; and next, the requirements for the two metals, even for monetary uses, are of a totally different kind, so that, as their non-monetary uses predominate, there is no practical interchangeability between them at all, and

governments consequently have no more power to fix a ratio at which they will exchange with each other than they have to fix the ratio at which timber will exchange for iron. In other words, bimetallism is a pure delusion, and nothing more. The history of the idea is, moreover, very far from creditable to its originators and adherents, and would dispose the student to pass it over, even if its absurdities were less flagrant than they are.—*Nineteenth Century*.

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### THE NATURAL EVOLUTION OF MAN.

BY A. DEWAR.

INTERESTING as most speculations are regarding man's origin and descent, none compare with the story unfolded by to-day evolutionists. The first results of the evolutionary theory were to take from him the belief in his divine creation in Eden, to rank him as a natural phenomenon amid countless others, and to class him, by an inference from Darwin's hypothesis, among the narrow-nosed apes.

Accurate scientists, however, now perceive that while man's origin and development, in common with other animals, have been doubtless effected in some way by evolution from a lower grade of being, the evidence involves neither a serial nor a genealogical transformation of presently-known forms, but rather a direct evolution of distinct genera from distinct genetic primordial ovules.

According to the Darwinian theory of organic evolution, the primordial source of all living forms was a cell or germ (originally brought into being by a creator) which transformed itself by the natural selection of favorable variations from a unicellular to a multicellular organism, from one vegetal to another, and from one animal to another, multiplying its numbers at each stage, and developing its own peculiarities genealogically until the myriad living forms of the present day are, at last, the result. These forms may again in turn become the progenitors of many other animal species yet to arise in the far future.

But it did not occur to Darwin that one cell could hardly create a struggle for existence. With no enemies or rivals,

and no call for natural selection to act, the only selection was "Hobson's choice." Again, according to the method of cellular reproduction, one cell could not be radically transformed into two different specific cells, even though it were multicellular. Hence, though the first cell, with only itself and its own offspring to contend, and all the world to seed over, might develop variations of itself ; but the possibility of the evolution or transformation of new species and genera from it is incredible. For instance, if the first cell were an amœba, the ocean would be stocked with varieties of amœbæ and nothing else.

Further, judging from the known modes of action in matter, the production in some favorable epoch of only one primordial germ on earth would be well-nigh impossible. Grant favorable conditions for the evolution of one germ the one hundred and twenty-fifth of an inch in diameter, through the alteration of natural forces, and one must grant, also, that similar conditions in the same or other spots would inevitably produce hundreds, if not thousands, of similar primordial germs.

The theory of universal transformation from one germ was assured from the apparent likeness of vegetal and animal cells to homogeneous lumps of protoplasm (such bodies being without apparent organization), and from the fact that evolution up to the gastrula stage shows physiological variation. But, with our imperfect vision and restricted appliances, to dogmatize on homogeneity and likeness in minute bodies containing millions

of invisible molecules, is ignorant presumption. The very fact of seemingly-similar cells developing into very dissimilar organisms remarkably conservative in type and persistent in duration, as most protozoa are, should render us chary of deducing hasty judgments; for, notwithstanding all their likeness and apparent homogeneity, cells may indubitably be not only heterogeneous in composition, but excessively complex in structure.

Scientists are gradually throwing overboard the extreme Darwinian theory. "Nowadays," says Herbert Spencer, "most naturalists are more Darwinian than Darwin himself . . . for, far from further broadening that broader view which Mr. Darwin reached as he grew older, his followers appear to have retrograded toward a more restricted view than he ever expressed." \* Professor Huxley, too, in unveiling Darwin's statue, deprecated the supposition that an authoritative sanction was given by the ceremony to the current ideas concerning organic evolution, in saying, "Science commits suicide when it adopts a creed." Recent theories put forward by Messrs. Romanes, Wallace, and Spencer of "Physiological," "Color," and "Embryological" † selections respectively, all further indicate a terrible reaction against the officious decaloguing by injudicious evolutionists of miniature Darwinian principles. Lastly, the bulk of the argument in the *Origin of Species*, as also most of the writing on evolution since, which indicates the tendency of progressive scientific thought, is distinctly in favor of abiogenesis, ‡ while the doctrine of transmutation from one or a few germs, which the book also contains, is at best but a secondary theory, adding nothing to the main link of the argument.

In place, therefore, of the hypothesis of the divine creation of one or a few primordial germs, and natural evolution therefrom, we deduce from the evidence before us an hypothesis which argues that

genera, if not species, had an independent origin in an equally, or nearly equally, ancient protoplasmic form, spontaneously evolved from the universal mother—Matter in Motion.

Man, like vegetables and animals, consists of proteids, albumin, gluten, febrine, aintonin, &c.—substances not met with in mineral bodies. Decomposed, these proteids resolve themselves into carbon, hydrogen, oxygen, nitrogen, &c.—primary elements equally common to minerals as to vegetables and animals. Though man, therefore, in his substance, differs secondarily, he does not differ primarily from other organic and inorganic products; even from sticks, stones, or rubbish; from the air he breathes, the water he drinks, the food he eats, or the soil on which he treads. Further, although every animal organism is a compound of unstable elements which ceaselessly add themselves to the body and leave it again with every breath which is drawn, yet that same changing substance, as far as human thought can follow it, is indestructible, and reproduces itself in endless other forms throughout the cycles of eternity.

The quaint conception of man's divine creation some six thousand years ago in the garden of Eden has, in our own day, been discredited by criticism, disproved by geology, and discarded by all intelligent men; and, now, recent discoveries of prehistoric human remains come to establish conclusively the existence of man in the miocene epoch of the Tertiary age. This implies an antiquity of hundreds of thousands, if not millions of years. Further, if those pre-Adamites were evolved from apes, or from some ape-progenitor, as Darwinians allege, then that transformation, at the same ratio of progress, must be antedated by other millions of years.

But, although Darwin propounded man's descent from some common progenitor of the Catarrhine (narrow-nosed) or old-world apes, he added, "We must not fall into the error of supposing that the early progenitor of the whole Simian stock, including man, was identical with, or even closely resembled, any existing ape or monkey." \* Hence, pressing this point in an endeavor to trace man's true line of descent as well as his absolute origin, we find virtual unanimity between

\* *Factors of Organic Evolution.*

† Or what is virtually so in his recent *Factors of Organic Evolution.*

‡ "Abiogenesis aids the theory of evolution by tracing the organic into the inorganic, and would relieve Natural Selection with its attendant causes from what many consider the too-Herculean labor of evolving all species from one or a very few primary forms."

"Abiogenesis," *Ency. Brit.*

\* *Descent of Man*, part i., chap. vi.

Darwin, the old Atomists, and the most pronounced materialists. For this ancient ancestor and common progenitor of man and ape was, according to Huxley, in all probability, descended from some amphibian—not a present form of amphibian, but some extinct type. This extinct amphibian's progenitor in turn was, probably, descended from some extinct type of fish; this fish from some arthropod; this arthropod from some mollusk; this mollusk from some coelenterate; this coelenterate from some protozoan; this protozoan from some lump of protoplasm, which lump of protoplasm was the assumed primordial form, the ancestor of all the ages. Protoplasm, however, is not a simple, but a compound substance—not a unit, but a mass; hence the source of human ancestry is not lumps of protoplasm, but protoplasm's indecomposable constituents, oxygen, hydrogen, carbon, &c.—the fundamental chemical elements of the universe. In effect, by Darwin's own words, the theory of man's transmutation from some kind of actual ape to man-form is discarded if it was ever seriously entertained, and is replaced by the doctrine of direct descent from matter to man, which matter has metamorphosed itself through amœbæ-like, fish-like, toad-like, and ape-like phases. Hence, in thoroughly unravelling human origin, we must transcend all organic forms whatsoever, and acknowledge man's fundamental, material, and energeal origin solely in matter and its motion; finally deducing that while man's primordial ovule may have been generated either divinely or spontaneously some millions of years ago, more or less, his first origin materially dates, like that of all phenomenal components known to us, from the commencement, at least, of terrestrial existence.

When the terror of the orthodox at the enunciation of Darwinian evolution subsided, and men reassumed their reasoning faculties, the shrewder clerical intellects soon announced that evolution and religion were beautifully harmonious, and that scientists and theists are truly brothers. Thus, said they, if an Omnipotent Creator could create at all, it was not more difficult for him to endow primeval germs with potencies sufficient to evolve gradually into men, than to fashion the full-grown Adam from the dust. The one involved no greater miracle than the other, hence there was

nothing at variance with the worship, at least, of a God.

But, why stop here? If the Creator implanted in germs the seed of infinite evolution, He could also implant in inanimate matter (of which all animals, as well as germs, are fundamentally composed) potencies sufficient to produce the germs themselves. But this being so, why not assume matter's possession of these properties as inherent constituents of its very existence, rather than its inoculation of them by a Deity? The assumption of an inoculating Deity actually introduces greater difficulties than it removes. Thus, if we have a right to ask how matter became possessed of these assumed inherent properties, we have an equal right to ask how the Deity became possessed of His inherent properties, and so on interminably. Present intelligence, therefore, demands that we stop our questionings at the barrier we know something of—Matter; not the barrier we know nothing of—Deity.

Again, if the Deity exist, the fact of His existence involves Him to be at least something—not nothing. Further, as, according to Hobbes, "motion only causeth motion," the Deity could not communicate energy or motion to matter unless He were Himself matter to move and cause motion. His sole energy is therefore virtually resolved into the motion of His matter. Again, any Deity cognizable by or knowable to us could only be so known to us by other matter communicating with our matter through the motion of our material senses, the divine matter impinging on our human matter; this practically implies that divine matter and human matter are identical.

In other words, the hypothesis of man's supernatural creation being inadmissible because void of evidence, contrary to reason, and exceeding scientific demonstration, the alternative agency, seemingly to the evolutionist, is spontaneous or abiogenetic generation by natural laws in eternal matter. But spontaneous generation is, at present, discredited by leading evolutionists (Huxley, Tyndall, Pasteur, and others), because, according to their experiments, living animals do not generate from inorganic elements under practically inanimate conditions. For instance, anti-abiogenesisists boil and bottle up infusions, expecting life to be evolved and sustained

under conditions entailed on no known life; and, failing, they wonder why incipient germs are not Shadrachs, Meshachs and Abed-negoas, able to pass through fiery furnaces unconsumed; as if Nature, merely for the purposes of popular experiment, should conveniently provide ovules with steel stomachs and cast-iron pseudopodia. Biological experiments and scientific reasoning are so equally balanced for and against spontaneous generation at present, that scientists generally are sceptics waiting further developments. Both cannot be right; and we assume, provisionally, the presence of only one something in existence—*matter*; and only one energy—the *motion of the matter*; and, therefore, that spontaneous generation through the action of the matter in suitable conditions is inevitable, even granting our ignorance of its mode.

The orthodox dread of the term spontaneous generation is needless, for it is not a law of creation, but a term covering other laws; not a cause itself, but a term expressive of the real causes. In fact, it only means chance generation by automatic laws; chance having reference to the determining conditions, the automatic laws to the actual agents of production. For example, under suitable conditions of heat, moisture, light, air, &c., a mass of matter containing carbon, oxygen, nitrogen, hydrogen, sulphur, &c., must, in virtue of its indestructibility and inherent mutual affinities, likes and dislikes, attractions and repulsions, automatically develop (for matter cannot rest), first, from inorganic, or so-called non-living, into living matter or protoplasm; and from thence, solely in virtue of the chance combination of elements composing the mass, and the nature of the structure reared by the irrevocable automatic laws governing atoms and their combinations, must grow into a protoplasmic vegetable or animal form. This form, again, may, as its structure, components, and environments automatically determine, either remain protoplasmic or become an amoeba, develop into one or other of the thousands of protozoic forms, and gradually metamorphose (disturbing conditions being absent) into a fish, an amphibian, a reptile, a bird, a mammal, or even a man.

We thus assert, what all evidence confirms, that there is nothing in the vital conditions of animal evolution opposed to

the generation of any animal whatsoever. The orthodox, however, ask, with orthodox logic, if man evolved spontaneously by natural laws thousands of years ago, why is he not evolved spontaneously now, and why cannot we trace him in some of his lower transitions, his ape-like, frog-like, fish-like, oyster-like, and amoeba-like phases? The answer is obvious. If man evolved from a particular chance combination of atoms at some particular juncture of conditions aeons ago, the recurrence of this particular juncture is tremendously improbable, especially when untold millions of possible organic combinations are equally open to inorganic matter. Besides, Nature, like an original artist, prefers to create a new form rather than copy an old one in her vast atelier. Further, even supposing some human progenitors were passing a period of painful pre-human probation among the Protozoa, the Cœlenterata, the Mollusca, the Annulosa, or the lower vertebrata now, how could we possibly recognize them as our brethren?

All animal ovules, man's included, are alike in appearance and development. Each is a nucleated cell, consisting of a cell-wall, enclosing protoplasmic elements in solution, carbon, oxygen, hydrogen, &c. An impregnated cell attracts and aggregates like protoplasmic components from its environments, this action constituting growth. After attaining maturity, it divides similarly to the vegetal cell, thus indicating a common origin and development of both animal and vegetal energy and life. Continued fission, or cell-division, results in an aggregate of cells or cell-aggregate; then follows the formation of an external layer of small polyhedral cells round the cell-aggregate called the blastoderm; the interior cavity being filled with fluid. Such an organism is called a Planula. Next invagination occurs, or the pushing in of one side of the spheroid planula, until, from a cup, it grows into a double-walled sac with an opening, in other words, a mouth and stomach are formed. This constitutes a gastrula, the simplest ancestral form of the Metazoa (all animals above Protozoa). The outer layer or epidermis of this gastrula is called the *epiblast*, and the inner the *hypoblast*; but, during the process of invagination, a central layer of cells has been growing between the outer and in-

ner layers called the *mesoblast*. The important organic facts in connection with those layers are, that from the epiblast are developed the permanent epidermis and its outgrowths, the nervous system and the organs of sense; from the hypoblast, the alimentary canal, liver, pancreas, &c.; and from the mesoblast, the bones, muscles, heart, blood-vessels, lymphatics, &c.

But though, up to the gastrula stage, the evolution of every multicellular animal, including man, is *apparently* alike, it is not actually so. For, with millions of molecules in each cell or ovule, the field for differences in molecular organization is practically illimitable. The cells of all animals cannot be absolutely homogeneous, although seemingly so to our senses; hence, generic differentiation must begin, not at the gastrula stage of development, but at the spontaneous creation of the ovule itself from elementary matter. From the gastrula stage, however, a marked differentiation begins, and the hidden constitutional features of each organism become more and more developed until such unlike creatures as fishes, birds and beasts, diverge into their several classes, orders, and genera.

These facts indicate that production and reproduction are chemical and mechanical processes alike in man and the lower animals, and in vegetals and minerals; the generation of a human ovule is a human ovary, differing not fundamentally from the isolation or fusion of an amoeba, the budding of a coral, the fructification of a fungus, or the petrification of a crystal. In all cases organic generation consists of the insulation of a cell, or concrete fragment of matter, embodying the fundamental character, constitution and essence of the organism. A process simple enough in natural operations when we remember that minerals are only infinite aggregations of mineral molecules; vegetals, infinite aggregations of vegetal cells; and animals, infinite aggregations of animal cells. Further, while the conversion of mineral molecules into crystals is due merely to their aggregation in a suitable solution under suitable conditions, the conversion of vegetal and animal cells into ovules or eggs merely happens from their more specialized aggregation in a particular chamber of the organism called the ovary; a modification of growth as natural as the metamorphosis of leaves into flowers and

fruit. The mechanical nature of the operation, too, is strikingly evinced by the immense number of ovules and eggs generated by various animals. Witness the daily issue of 80,000 from that organic egg-manufactory—the termite queen; the million and a half laid by the queen bee, and the quintillion deposited by the aphid or plant-louse. Again, the herring produces 25,000 ova, the lump-fish 155,000, the halibut 3,500,000, the sturgeon 7,635,000, and the cod-fish and oyster no less than from nine to ten millions.

Mr. Herbert Spencer, in what might be called a new theory of embryological selection,\* lately drew public attention to the connection subsisting between an animal and its environments, especially in the lower organisms, as he found therein a cause of differentiation of similar species and development of new species entirely dissociated from Darwin's doctrine of natural selection and survival of the fittest. Perceiving, for instance, how the homogeneous protoplasm of a ruptured rancheria escaping into water envelops itself, simply through the chemical action of its environments, with a firm peripheral covering, a covering out of which higher animals than gastrulæ primarily evolve all the organs of sense and the nervous system, he suggests that the inevitable contact of a lowly organism's epiblast and hypoblast with its surroundings, whether touched or tasted, virtually originates those rudimentary formations which gradually develop into the immense variety of external motors and sense-organs characteristic of more complex animals. Hence by a difference in the nature, temperature, transparency, motion, &c., of its environment, a gastrula or even a young foetus in the womb may develop new organic variations which virtually entitle it, when fully developed, to be called a new species of its own genus. Not only so, but what is doubly important from the mental side of the problem, the nature of an animal's intelligence, dependent as this intelligence wholly is on an animal's sense-organs and nervous system, must also be largely influenced in its evolution from a lower state by the kind of reciprocity developed between the primal epiblast and its environments.

\* *The Factors of Organic Evolution.*

An important factor in organic evolution, hitherto overlooked, is that common phenomenon, metamorphosis, characteristic to a greater or lesser extent of all organisms in the sub-kingdoms of the Vegetalia and Animalia. In the lowest fungi and algae, a spore passes by "alternation of generation" through several moults before reproducing the parent type. In the Protozoa, Hydrozoa, Actinozoa, and Polyzoa, metamorphosis is general; the difference in appearance, organization and function in all the stages being equally as marked as in man's embryonic transformations. In insects, metamorphosis is universal. Among the crustaceans—the barnacle, acorn-shell, crab and lobster evince strange metamorphoses. The tadpole-stage of frogs is familiar to all, while the marsupials among the animals (kangaroo, opossum, &c.) produce their young imperfectly formed, and nurse them in pouches until fully developed. The significant fact for natural evolution in connection with these metamorphoses is, that reproduction does not occur in any of the intermediate stages, but only in the mature animal. For instance, the butterfly does not reproduce either in the caterpillar or the chrysalis state, but only when fully developed as a butterfly.\* Similarly, in the series of metamorphoses through which we assume all primordial organisms were transmuted while developing from the ovule to the mature phase, no organism reproduced itself except the last.

Reproduction we thus allege to be the phenomenon which marks the completion of a generic organism, the end of its series of susceptible transformations beyond which, except in slight modifications of form and color, whereby it is arbitrarily classed into different species or varieties, it cannot pass. Thus the amoeba, by undergoing fusion, and the volvox by copulating, never surmount the protozoic sub-kingdom, while the caterpillar and the tadpole, by not reproducing, metamorphose higher.

That primordial man, as well as the original ancestors of all the leading genera of animals, was also evolved by a series of moults or metamorphoses,† assisted and modified, more or less, by agencies which are described in current theories of selection—i.e., Natural (Darwin), Physiologi-

cal (G. J. Romanes), Color (A. R. Wallace), and Embryological (Herbert Spencer), is thus not without circumstantial evidence. How long each took to develop, in this way, from its spontaneously-created ovule is, however, a subject for speculation. At present the human ovule grows into a babe in only nine months, but the embryo under present conditions of generation is developed in the best of circumstances, in a regular man-making machine, which works automatically, with only one thing to do, everything to hand, and the risk of modification by untoward environments reduced to a minimum.

Primordial man-evolution by metamorphosis, on the other hand, was bound to occupy more time, for we could hardly expect a human ovule spontaneously developed in a pond of water to metamorphose month by month through amoeba, gastrula, fish, frog, mammal and monkey phases, and eventually to issue as a man-child in the ninth month, because the conditions were not suitable. Instead of being fed automatically, as a child is in the womb, the metamorphosing ovule would require to feed itself at every stage, unless, like the caterpillar, it ate enough at one stage to enable it to hibernate through another. Still, as even a newborn child is helpless and unfit, for years afterward, to provide for itself, under the best of circumstances, we must infer that human evolution by metamorphosis was a slow process, that years were consumed in development, and that a comparatively adult stage was reached before the final moult scaled off, and man, in his finished form and complete reproductive functions, recognized his superiority to his brother the ape.

On the hypothesis of animals originating in and spreading only from one genital centre, a seeming difficulty (in higher animal evolution) arose from the fact of similar highly-complex plants and animals tenanted continents separated by deep seas. But Darwin ably met this objection by showing how eggs and seeds could be transmitted long distances by the agency of birds, floating trees, winds, currents, &c., while geology indicated great diversity in the prehistoric continents and seas of the earth.

On the hypothesis of spontaneous generation, the difficulty is still further lessened; for the time which ensued between

\* Metamorphological Selection. † *Ibid.*

the birth of the ovule and the appearance of the fully-developed reproducing animal, being passed, as much of it necessarily was passed, in water, would be sufficient to enable similar organisms to migrate thousands of miles from one another; and the fact of their being subject to different climatic influences and material conditions during the various stages of their growth would cause them to evolve into different species of the same genus, even to become men of different color, black, red, and yellow, or even with flattened noses and splayed feet.

From Embryology we learn that man's evolution from the gastrula stage in the womb is as follows:—After living as a sort of jelly-fish, and acquiring a skeleton or backbone, he develops gill-like slits on each side of his neck, up to which the arteries run in arching branches as in a fish; while his heart is a single pulsating chamber like that of the lowest fishes. Next, he is a tadpole with branchiæ. At a later period he is a mammal with a movable tail considerably longer than the leg; while the great toe projects from the foot like the toes of adult apes. During the sixth month the whole body is thickly covered with fine wool like hair, extending even over the face and ears, everywhere, indeed, save on the lower sides of the hands and feet, which are also bare in the adult form of the monkey. Only at a still later period does the embryo show signs of becoming a man instead of a gorilla.

Man's embryological development consequently indicates a rising scale of being evolved in the womb, paralleled by existing animal life as evolved by natural laws on the earth's surface. As the highest product of both evolutions is, in man's humble opinion, man himself, we naturally infer that the embryo stages of man's development but presents a condensed representation or panorama of what actually occurred in prehistoric ages, in man's gradual development from his spontaneously-produced ovule.

From the preceding argument we now proceed to speculate on the probable mode of man's actual evolution, correlating all the phases of amœbæ, jelly-fish, tadpoles, and apes, through which he passed before finishing his probation as a lower animal and becoming a human being.

In the evolution of the earth from its elementary substance (no matter what its

sidereal parentage may have been), the forces in operation were, primarily, the same as they are now, though perhaps differently manifested. The conditions of life were then favorable only to modes of action which produce minerals and crystals; for the high temperature of these early ages precluded organic existence. But as this igneous activity subsided, when water, soil, light, and heat were able to interact, and the protoplasmic elements, oxygen, hydrogen, carbon, nitrogen, &c., met in suitable proportions, these in their combinations brought about, at length, the production of the first simple organisms, protophyta, protozoa, and the lowest kinds of fungi and algæ. Further, if those formative conditions remained permanent and general, as at present, the spontaneous evolution of vegetal and animal germs would in turn occur by a species of contagion; all sorts of organism sprouting contemporaneously; not only protozoa, but the cells of future coelenterata, mollusca, annulosa, and vertebrata, including the germs of fishes, amphibians, reptiles, birds, mammals, and even man.

In this medley of life, the germs of similar vegetable and animal genera would not be likely to originate contemporaneously in different localities; this view is confirmed by the endemic nature of much of the world's flora and fauna. Hence the evolution of each well-marked genus of animals—say the lion, elephant, cat, dog, ape, and man—probably occurred in circumscribed areas of earth and nowhere else. Further, it is unlikely that Monogenism prevailed, that is, the evolution of solitary primordial germs of each animal genus; but Polygenism, involving the evolution of many germs of cats, dogs, monkeys, and men, which all sprang contemporaneously from the primal protoplasm, and afterward differentiated by metamorphological or other modes of selection into the numberless present species and varieties of each genus.

Man's first progenitors thus, probably, appeared on earth as spontaneously-produced protoplasmic cells or ovules, hundreds or thousands in number, developed from a flux of the chemical elements in some inlet of water. These cells, propelled by flagella or otherwise, grew first into protozoa, and fed on minute algæ. A further metamorphosis, primarily determined by the nature of their material con-

stitution, but assisted accidentally by the nature and action of their environments, converted them first into gastrulae, next into jelly-fishes, and then into vertebrates. In this state they probably migrated immense distances from one another along the shores of their natal sea, feeding on minute infusoria, &c., and subjecting themselves to different environments whereby different organic functions developed, until, on entering other inlets or rivers, they metamorphosed into amphibia, and browsed on herbs as well as algae. Forsaking the water—their natural element—and in some stress of circumstances adopting a life on the land, they would next change into small mammals, develop a coat of hair, legs, and a tail, and vegetate on grass and herbs. Another meta-

morphosis converted them into the ape-form, in which state trees would be their home, and fruits and roots their diet. Lastly, on a final moult, they would discard their coat of hair, emerge as fully-developed men and women, with perfect sexual organs, and capable, for the first time during their long series of metamorphoses, of sexual union and the reproduction of their kind.

From this time multiplication would result by sexual intercourse, aided more or less by natural, sexual, physiological, and color selections, use and disuse, &c., until the highly-differentiated European of to-day has now appeared upon the scene, the perfected product, so far, of all this progress and change.—*Westminster Review*.

#### WOMEN OF TO-DAY.

BY LADY CATHERINE MILNES GASKELL.

"WHAT an easy matter it is to stem the current of our imagination, to discharge a troublesome or improper thought, and at once return to a state of calm!" So wrote and thought the great Roman emperor and philosopher, Marcus Aurelius.

Alas! for these degenerate days, how few men and women can coincide with this opinion! Great have been the inventions of this present century—railways, electricity, and telephones—but in direct ratio to the importance of these inventions has the spirit of meditation, the enjoined repose of the philosopher, disappeared from our world. These conditions of mind are as much out of date and as rare to meet with as the spinning-wheels of our grandmothers or the stage coaches that our forefathers travelled in.

If this state of unrest, the constant journeyings to and fro, and the continual mental excitement, have told heavily upon this generation of men, still greater is the burden that now rests upon the shoulders of women.

The "old order changeth." Silent revolutions are being daily performed under our eyes; and it is only because these changes are gradual in their development that men in general pay them so little heed. No one will deny that the education of women has increased and

grown enormously during the last few years. A different standard of perfection has been raised, and, above all, strange and new requirements have been added to the old code.

Woman is still to retain her charm; all that art can do in dress, grace, and refinement, and seduction of manner are as keenly appreciated as ever.

But, besides these light and airy graces of the old school, it is now felt that the more grave and serious parts of education must not be found wanting in a woman. She must do more, from a literary point of view, than superficially glance down the columns of a newspaper; while the susceptibilities of her friends require greater artistic excellence than was evinced by her mother (when she took the Captain's heart by storm some thirty years ago by singing a few popular airs of the day); and as to her water-colors, they must be better than her aunt's roses entwined with auriculas, which were considered such works of art at that time.

If she is to exercise artistic faculties, it is only powers of the first order that her acquaintance will greet with favor.

The old-world indulgence with which elderly people of a former generation hailed the very mediocre attempts of their young friends to amuse them after dinner

by a solo or duet, partly in but often mostly out of tune, that kindly feeling of acceptance is as much an emotion of the past as the Pyramids or armor of the middle ages are relics of past civilizations. In old days people laid to heart the old saying of "You must not look a gift horse in the mouth," and there was a general feeling prevalent that what you did not pay for you had no right to criticise.

Beyond all this, it is now found indispensable that every woman should take a part in charitable and even in political organizations.

To obtain proficiency in these objects, it is requisite that she should acquire business-like habits, and be able to write, and even to speak in public, if not brilliantly, at least with fluency and to the point. Added to these new tests of education, a woman is still expected to be a good linguist. It is thought absolutely necessary that she should be able to read and to express herself with ease in several languages. It does not excite astonishment that a man should have spent most of his early life at a public school, and then at one of the Universities, nominally learning Latin and Greek, and at the end of what he is pleased to call his education be guiltless of being able to translate a stanza of Horace or a line of Homer intelligibly.

The old fiction that the equivalent to a Latin or Greek quotation is not to be found in the English language is a fable that has been repeated so often that it is hardly to be supposed that women will lose faith in their interpreters at once.

On the other hand, it would be considered extraordinary that a woman in society, who had travelled in France, or who had had the advantages of a French governess as a child, should not be able to express herself in French with ease, talk if necessary to a French attaché at a London dinner-party, or write correctly to her modiste in Paris. Added to all this, the athletic developments of a woman's education must not be forgotten to be mentioned here. The same critical faculty is brought to bear upon her ability as a lawn-tennis and a cricket player; and if she does not shoot, at least she is expected to show the same endurance as a man, when she walks over miles of heather, or through fields of turnips. To all these graces, accomplishments, and physical ex-

ercises are added her old duties of wife, mother, housekeeper, and hostess.

In all these departments much more is required of a woman than formerly. Not only in every branch is everything to be done personally, but done better, and more fully. A woman now aspires not only to be the nurse of her children, and the protectress of their infancy, but desires when they grow up to form and guide their minds, and to influence them long after the time when her authority shall have ceased.

A larger capacity and a broader understanding are demanded on all sides from women. Even the type of a woman's woman is changing. A figure-head of inane incapacity, very mediocre mental attainments, veneered by refinement of manner, and clothed in French millinery, is no longer an ideal to women; while men are no more contented to find in a woman merely a recipient of their thoughts and ideas, a worshipper who places them upon a pedestal, and who, by means of her own limitations and ignorances, clothes them in the giant's robe. Women are daily opening more and more their souls and minds; they are beginning to learn the secret of how to make the divine fire—not only to boil the domestic pot, but also as a delight and pleasure to themselves.

As the managers of households much more now is demanded of them. People no longer live all the year round in one place. In one country house one thing is often found to be good, in another bad. Little customs vary and change, and every woman who looks at housekeeping from an artistic point of view, and not merely as a daily drudgery, will always be anxious to effect constant reforms; to take valuable hints wherever she can find them, and to add fresh graces to her table and to her rooms. Take alone the arrangement of flowers on a dinner-table—a completely modern art, almost unknown, except in its simplest rudiments, to the last generation. Many a social aspirant believes it to be *de rigueur* that her table should be arranged in one kind of flower, and in one color. To obtain a sufficient quantity of blossoms Covent Garden has to be ransacked, and such skill is demanded that little short of a floral education is necessary for a woman to be the decorator herself. Then all the accessories of hospitality are much more

complicated now than formerly. Breakfasts, dinners, shooting luncheons, picnics, and five o'clock teas are all pushed to such a pitch of perfection and luxury, that they would have seemed to our grandmothers feasts only to be found in the *Arabian Nights*.

But perhaps the hardest burden of all is the vast number and constant change of subjects and occupations that a woman has to get through in a day. There are so many little things that must be done: little things that seem so trivial in themselves that they are not worth mentioning or particularizing, but which, if left undone, would place a household in chaos, and make every member of it uncomfortable. Every one knows by comparison the difference between a house where a woman of education and refinement gives some of her thought and personal care to the comfort of her guests, and one where all is left to the servants. We can all recall in certain houses the sheets scented with lavender, the enticing quill pens and the dainty bunch of flowers, the cosy fire on a cold day, that all-whispered welcome to us as we entered our bedroom, and compare them favorably with the scrubby and torn blotting-book, the black and incapable pens, and sullen grate, that have been our fate in other places. In one house we have felt instinctively that the hostess has looked upon no details as too small or beneath her dignity; that no guest can come too late or go away too early.

Men generally laugh at what they term "fussing" on the part of a woman, or, in other words, any mention before them or discussion of household duties. And yet all is to be perfection, particularly the "cuisine;" the "Julienne soup" is to be worthy of a French café, the "côtelettes à la soumise" irreproachable. It is true that they retain their privilege—as Englishmen—of grumbling; but that is, as a rule, all the help they are willing to give a woman in domestic matters. Till people have done a thing themselves, they always underrate the labor that it requires to do it efficiently. "It looks so easy, it cannot take long," is said as often by men and women as by children. The next time that Lady Clara Vere de Vere goes to Ascot, it might add to her experiences of life if she were on one occasion to pack her own boxes. She

would, perhaps, by means of that experience, better understand the look given her by her maid (of indignant mortification) when she decides at the last moment to change her travelling dress for one that is reposing at the bottom of her trunk. The law of the Medes and Persians will not suit an English household—a system that works well for a few months is not necessarily good for all time. A change of household often involves to the woman as much trouble and annoyance as a change of ministry to a country. Nor must it be believed that because a household is numerous, and a woman has many servants under her command, she can, to quote the vulgar phrase, "be quite a lady," loll on a sofa all day, and read a novel.

"Too many cooks spoil the broth," and often, with their discussions, recriminations and quarrels, much more time is lost and wasted by the cooks than was required for the actual making of the soup. John Stuart Mill, in his *Subjection of Women*, speaks of the many and various duties of a woman, and compares her life "to an interrupted sentence." Many women sink beneath the fretting burden of daily commonplaces and trivial duties. Lord Lytton, in one of his novels, writes, "How many Hampdens and Miltons are killed by the atmosphere of a drawing-room!" How many more Brontës and "George Eliots" are destroyed by the load of conventional life! Nobody looks on a woman's time as sacred. Who ever heard of a woman's study in any country house? A man may be the most bucolic of mortals, or only happy in the company of his dogs and gamekeeper, yet courtesy confers upon his private apartment the epithet of "study," and his leisure is always considered sacred. Inauspiciousness is no longer considered a mark of ladylike refinement. Even princesses in these days would not be considered musicians if they could not play better than the Princess of Hans Andersen's story. The knowledge of what is really good in art or music no longer belongs to a coterie. The kindly amateur whose small attempts were greeted by his friends with enthusiasm in the last century is becoming extinct. "Unless you can do a thing well do not do it at all," is not only said in public but in family life, and nobody wants accomplishments unless they are of so superior an order that they can command respect any-

where. This keen state of criticism makes it very hard for women who cannot give up an immense amount of time to the culture of one art or accomplishment to gain any credit for their performances. Every one who has at all dabbled in an art or accomplishment knows the work and labor required to attain a high standard. How little time a woman who is married and has children can give, we will beg wives and mothers to decide.

In the last thirty years, three strongly marked but different types of womanhood have been the objects of admiration and ridicule of the English world. John Leech laughed with kindly admiration at the Di Vernons of his day who would join the hounds, and vie with their brothers in equestrian exercises. Some ten years ago, a girl with a brown skin, green eyes, and a profusion of red hair, thought by decorating herself with sunflowers, attiring herself in sage green, and by interlarding her conversation with such adjectives as "aesthetic" that she was posing before the world as a poetical creation of Rossetti's, and was ensuring the sympathy and affection of all cultivated beings.

And now the type has changed again. A pot-pourri of all known types is the demand of the day. The woman of the present day is to be little short of an Admirable Crichton in petticoats. Mothers impress upon their daughters that they are to be all things to all men. "If you do not like hunting, you are to affect to," says mamma. "You must listen to Captain Breakneck's stories at dinner, laugh in the right places, and ask intelligent questions about his steeplechasers." "Tomorrow you will sit by Professor Dryasdust; do not forget to look through his three volumes on the Evolution of Thought, so that you may impress him as an educated being. Next week you will meet the Bishop of Middlesex, and remember to talk to him about his mission in the East-End. This afternoon we are going to Madame Le Jour's party, where we shall meet artistes and foreigners, and I shall expect you to be able to talk to all if necessary." The age has gone by when weakness, physical or mental, passed for an attraction in women. Heroines, in bygone days, screamed, indulged in fainting fits, and showed "proper feeling," by losing all control over their emotions. We are no longer taught that too much

courage is unfeminine, and "Don't be a muff" is applied as much to girls as to boys. The old division of virtues, the old creed that what is good in man is not good in woman, is quite out of date. It is no longer impossible for women to meet each other with pleasure, and to talk on matters of general interest. After a London dinner it is often possible, before the men come upstairs, to hear bright and lively discussions on literature, art, and politics. Women, when they are with women exclusively, have ceased to confine themselves entirely to discussing their children's maladies, or going over the domestic troubles occasioned by their servants. Another change has come over the spirit of women. In gatherings or meetings of their own, it is no longer indispensable for them to have a male pope to perform the rites of the meeting, and to dictate for each her mental and moral attitude. Our grandmothers, when they read theology, read it under the auspices of some priest or doctor of divinity, by whose side morally they trotted along in the gutter, thinking themselves blessed if they received every now and then a little of the mud from the holy man's shoes. This moral phase of exaggerated intellectual veneration has almost disappeared. Men and women are beginning to meet in literature and thought on equal terms, while women are beginning to be able to be interested in lines of thought, and creeds free from personal considerations and influences. In a former generation, a woman, like a fly in a spider's web, fell under one influence, never to get free from it again. She had one spiritual revelation, or one imagined one, and as she spent her life in one place, year by year, with the same people, in the same moral atmosphere, in the same leading strings, she was never likely to question the views or the beliefs of her own set or her own guide, and indulge in new thoughts, new principles, and new aspirations. But in these days neither man nor woman can hedge himself or herself round and say, "So much will I believe, and nothing more or less." Ideas, beliefs, and politics are always changing, developing, or being modified. We are living so fast now that we can almost see the mustard seed growing as we gaze. We have only to take up a paper or book of some fifteen or twenty years ago, and a social or polit-

ical idea which was qualified then as impossible, revolutionary, almost incendiary in its tendencies, elicits from us, in the present day, only a good-humored smile, and the remark, "Well, that has come, but the world is going on still very much the same." The idol of to-day is often destined to find its place in the rubbish-heap of the future, and such a change of opinion indicates on the part of men and women neither insincerity nor a voluntary desire to deceive. Women's minds are growing broader, and they are beginning to be capable of realizing that no creed can contain the whole of truth, that each mental development leads to another; and, after all, that the growth of the mind is like the growth of the body—each must do it for herself. Every one in society knows Lady Fanny Cleremont, a typical woman of her time. She was once asked what she did in a day. Her answer was, "I try and get through some fourteen hours of work, and endeavor to cram in as much play as possible. Above all, I aim at growing a soul in spite of being a wife, a mother, and a hostess. I am always trying to read and improve myself, and I am always being called back to the petty things of life, by incessant interruptions; leisure is like my pocket money, exceedingly scarce. There are so many objects for both; every one comes to me for advice, orders, sympathy, and information. I am supposed to have the qualities of a thoroughbred, combined with the patient endurance of the garden donkey. I constantly feel as overworked as a bishop or a Scotch station-master in August. I speak in public, open bazaars, address political clubs and associations, write for several magazines, have a numerous correspondence with my own family and with friends, literary and political, preside over and superintend several political and charitable organizations, while all the time I have my children to educate and see after, my husband to play lady-in-waiting to, my household matters to superintend and regulate, my parish in sickness to provide and care for, and the county neighbors to call on and entertain.

"The great pull that men have over us is, that they are supposed to do only one thing at a time. Now Jack" (alluding to her husband), "when he is going to make a speech, shuts himself up in his study, and during those sacred times denies him-

self to men and angels, allows no interruption, devotes his mind entirely to the subject he has in view, and is able by custom and general consent to remain absolutely undisturbed as long as he considers necessary; the children at those times must make no noise in the house—our bishop or the local political agent may call under these solemn circumstances, but both are sent empty away, and even the stud-groom cannot always gain admittance. Now I as a woman have no recognized leisure. When I write, it is with the children all round me, racing about, bear-fighting and tumbling over one another. As to the old theory that the cook and the different members of the household can receive their orders once and for all finally, and in the early part of the morning, and be done with for the rest of the day, that comfortable old view is thoroughly exploded. Like the poor, household duties are ever with you. Something in a large household has always to be ordered, and counter-ordered. Telegrams arrive at all hours. Fresh guests come, or friends that were expected write to say that they are detained at the last moment. Nothing is too small, nothing is too trivial, for a woman's ears. Yesterday, for instance, I thought in the morning I had a little leisure, and I hoped to grow a little soul—just a shoot, by trying to renew acquaintance with one of Herbert Spencer's books. I cannot tell you how refreshing a chapter of deeper thought than I can usually afford time for is to me—I feel as much invigorated by it as by a gallop over some breezy downs. I had just taken up my book and was reading to myself 'How to Live?' 'That is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is, the right ruling of conduct in all directions and under all circumstances'—when my cook came in with an apology to inquire had I forgotten the truffles; but they were absolutely necessary for her entrée to-night?

"Hardly had the door closed, and I had tried to give up my mind entirely to my book, when the butler entered and asked me whether it was my wish that he should take orders from the gardener. I closed my book in despair, and listened to a long but fiery monologue of that func-

tionary on the indignities and insults that had been forced upon him. I endeavored feebly to stem the torrent of his indignation. At last even he had exhausted his rage, and the door closed, and I hoped at last that I might have a little peace and quiet; but in this matter I was soon doomed to be disappointed. The other indignant person of the story, hearing through the friendly cook, to use his own expression, that his character was being taken away, also sought my presence. Then I heard a longer and still more incomprehensible tale, in which button-holes, cabbages, indignities and insults were heaped one upon another. I listened wearily enough, gave no opinion, and determined from sheer inability to fathom the cause of the quarrel to pursue a grand policy of *laissez aller*. After this domestic crisis I attempted to read, but the words swam before my eyes, and my mind was incapable from nervous irritation of following any argument closely. Just as I was beginning to regain my calm, the door was flung open and the twins came in with a request that I would go on the lawn, and see them jump leap-frog. After that Mademoiselle joined us out of doors and informed me that my eldest daughter's manners and behavior toward her were a subject of sincere regret, 'qu'elle était d'une impertinence incroyable'—and that she begged under the circumstances to give me notice. Closely following upon the heels of these events, the village schoolmaster called to complain that the curate had visited the National School on Friday and had told the children to stand up on his entrance. But that was a thing that he, Mr. Jones Thomas, representative of the majesty of the School Board, as he pictured himself to be, would not tolerate. He was good enough to say that he liked clergymen in their proper places. Apparently, he was not kind enough to in-

clude the National School as one of them. In the midst of this discussion my cup overflowed by the announcement that my mastiff Brenda had bitten our most important tenant in the leg. Mr. Landcorn, it appears, had called to ask for considerable reductions. I was sorry for this, as I knew it would vex Jack, particularly as I was afraid that after this occurrence Mr. Landcorn would ask for still greater reductions.

"In the afternoon I drove with Jack, and we tried together his new pair. At five o'clock I opened a music hall at Durnford, and I made a little speech upon the development of musical feeling in the county. Stopping at the lodge on my way back, I got out and read a chapter of the Bible to my maid's old mother, who is dying of cancer. I was annoyed to find that she had not had on that day her basin of soup from the Hall as usual.

"I only got back to the house just in time to receive my guests. They consisted of a Whig peer, a Tory democrat, a stockbroker, a celebrated actress, a philanthropic Jew, an editor, an Agnostic, a Jesuit, and a Protestant tempered by Mahometanism. They all talked at dinner, but I was too tired to take an active part in the conversation myself. There was one little mishap—the fish did not arrive in time. Jack grumbled at this, and said it was my fault; that I ought to have remembered to have called for it in the afternoon when we were at Durnford. I am sometimes at a loss to solve the problem why a woman is always expected to do the remembering for her family through life. Memory is a special gift, and yet I never heard of any fairy godmother putting it into a child's cradle at her christening."

Fashionable doctors speak and write about two diseases alone; gout they give to men, nervous exhaustion to women.—*Nineteenth Century*.

## THE GARDENS OF POMPEII.

BY ELISABETH LECKY.

THOSE who have had the good fortune to visit Pompeii will remember that important Greek addition to the Roman house, the *peristylum*, which became the centre of domestic life, while the *atrium*

was reserved for the reception of clients. It was a covered gallery with columns round an open court, from which the private rooms of the house received their air and light. It was larger than the *atrium*,

and the open space in the centre was also much larger. While the *atrium* had its reservoir, or *impluvium*, for receiving the rain-water, the *peristylum* usually had a fountain, or a *piscina*, surrounded with shrubs and flower-beds. This was often the sole *viridarium* or garden of the house, but many of the houses have besides a garden at the back, which had also frequently a fountain either in the centre or against the wall. In some of these gardens, as well as in the *peristylia* the root of the plants, the tiles round the beds, and the leaden pipes for the irrigation have been found. In the house of Pansa, one of the largest at Pompeii, in that of Epidius Rufus, and in another nameless house, the long, narrow, symmetrical rows of beds, leaving no room for regular paths, clearly show that the space had been devoted to the cultivation of vegetables. There, no doubt, grew the renowned Pompeian cabbage mentioned by Pliny and Columella. These gardens are divided from the houses by a portico with one small room opening out into it, probably that of the gardener. In Pansa's house all traces of beds have now disappeared; they are preserved in that of Epidius Rufus, and behind the vegetable garden of this house there is a raised piece of ground which may have served as a flower-garden. Mazois, the ardent archaeologist, who devoted the best years of a short life to the excavation and study of Pompeii\* describes the garden of the house of Pansa and his emotion on seeing a small plant appear on the freshly excavated ground. He watched it from day to day with eager attention, but alas! it proved to be nothing but a wild pea common to that neighborhood, which after the removal of the soil had been swept by the rain into the ancient kitchen garden. "Il fallut," says Mazois, "renoncer au plaisir d'avoir trouvé de l'herbe antique, mais malgré l'extravagance de ma première idée, j'eus de la peine à prendre la vérité de bonne grâce, il me semblait qu'elle me volait quelque chose."

These vegetable gardens furnish an interesting illustration of a passage in Pliny's Natural History. Speaking of the way to lay out a garden he says: "The ground should be divided into plots or beds with

raised and rounded edges, each of which should have a path dug round it, by means of which access may be afforded to the gardener, and a channel formed for the water needed for irrigation." One perfectly isolated garden has been found with only a small habitation for the gardener attached to it. This was likewise laid out in symmetrical rows of beds which looked more business-like than ornamental; it was to all appearance a nursery-garden kept for mercantile purposes. Round one of the beds a row of pots, consisting of *amphoræ* divided from their upper parts, were found in the earth close together. These were evidently meant to hold plants or seedlings. "There are few establishments at Pompeii," says Overbeck, "which are so analogous to our own and present such a familiar look." In the house of Sallust, where there was but little room, the garden consisted of a pathway running along a portico. Flowers were planted in boxes on each side, and the outer wall was painted with fountain-jets, trees and birds to give an enlarged appearance. A charmingly decorated summer *triclinium*, or dining-room with an arbor opened into it. The stone seats, the leg of the table, the adjoining altar for the libations, the marble basin for receiving the fountain which sprang out of the wall, are still there, and it is difficult to realize that the life that once animated this lovely scene vanished from it more than eighteen hundred years ago!

Representations in fresco of gardens such as those on the walls of Sallust are very frequent at Pompeii, and though they are now unfortunately much faded, they still throw a curious light on the arrangements of the gardens in those days. They were introduced into mural decoration by the Roman landscape-painter Ludi-  
dius, in the reign of Augustus, and seem to have been much in favor. They were especially intended for the walls of gardens and *peristylia*, but they have been found sometimes in other places—chiefly in bath-rooms—both at Pompeii and in Rome, and even in a tomb. Pliny the Younger mentions paintings of this kind in his villa in Tuscany. In the letter describing his house and gardens he speaks of a room, "which being situated close to a plane-tree enjoys a constant shade and green. It is sculptured in marble up to the *podium*, and above it is painted foliage

\* He died in 1826 before his work was completed. The architect Gau continued it.

with birds among the branches, which is not less graceful than the marble. Underneath there is a little fountain."

In a place like Pompeii, where the houses and gardens were small, these decorations had special advantages as they were intended to represent an extension of space. The designs were very varied, as may be seen from the fragments that remain. Among flowers and groups of trees there are fountains, statuary, trellis-work, large birds, such as peacocks—all of natural size,\* and illustrating how much care was bestowed on the ornamental gardening of that period. Of all the paintings of this kind the best executed and best preserved have been found on the four walls of a chamber in the Villa ad Gallinas of Livia, excavated at Prima Porta near Rome in 1863. They represent the whole plan of a garden with trees, flowers and birds, and bear the stamp of a master's touch. In the necessarily rapid fresco-execution the salient features, such as the character of the foliage by which the trees are distinguished, have been vividly brought out, and it is thought not improbable that they may be by the hand of *Ludius* himself. But though inferior in execution none have come down to us with more touching associations than those which were found in the tomb of a Greek family near Rome on the Latin road between the tomb of the Scipios and the Columbarium. In a frieze above were the portraits of the different members of the family, twelve in number, with the names inscribed, and below it there was a painting of trees and birds with the blue sky seen through the foliage. On a stone in this tomb a remarkable inscription in Greek verse was found. The owner, identifying the painting with the reality, rejoices that no thorns and brambles grow round his tomb, and no night-birds shriek near his resting-place, but that his shrine is surrounded with beautiful trees and fruit-laden boughs, the cicada, the swallow and nightingale singing their melodious songs. His name was *Patron*. He did good to men on earth that in Hades also some lovely place might fall to his lot. He died in his youth, and all that now remained was the work he had done in his

lifetime. The tomb has been described by *Padre Secchi*, and *Wörmann* gives a very pretty German translation of the lines, which show that there existed in the ancient world, especially among the Greeks, as deep and genuine a love of Nature as could be found in modern times. The paintings have been ruthlessly removed, and it is not even known what has become of them.

In the Casa del Centenario, the remarkable house partly excavated in 1879 at the time of the eighteenth centenary of the eruption, there is a small garden, with a frieze representing an *aquarium* in which zoologists have recognized the present fauna of the Gulf of Naples. Two of the groups—a fight between a polype and a murena, and a lobster killing a murena—are remarkably well executed.

In that beautiful and interesting house of the Faun, the garden is surrounded by a portico with fifty six Doric columns. In the so-called house of *Diomed* the garden also has a portico, and it may be remembered that close to the gate were found two skeletons, believed to have been those of the master and his slave who tried to escape while the other members of the family had hidden in the cellars. With the assistance of the Pompeian pictures, and especially the description given by the Younger *Pliny* of his villa in Tuscany and various passages in the *Elder's Natural History*, it is not difficult to reconstruct the leading features of the Roman gardens.

They must have borne a close resemblance to those which *Le Nôtre* laid out in the seventeenth century, and of which we still find traces in old-fashioned country houses. This style had in fact grown out of various attempts made at different periods, especially since the Renaissance, to reproduce the classical gardens of antiquity. Straight alleys, not unfrequently converging to a centre, the so-called quincunx, symmetrically laid-out flower-beds surrounded with box or tiles, close and double plantations of trees, shrubs clipped into hedges, pyramids, and sometimes men, animals, ships, letters, with the trellis-work, statuary and fountains we see in the Pompeian pictures—such were the main features of the gardens in the first century of the Empire. The tradition of them was more or less preserved in the monasteries all through the Middle Ages, and before *Le Nôtre's* time there

\* This refers only to the garden representations that cover the wall. There are other smaller ones in imitation of panel pictures.

had been a growing taste in Italy, in England, and notably in Holland, for reviving the tree-sculpture of Pliny. Horace Walpole speaks of a piece of ancient Arras tapestry at Warwick Castle in which there was a garden exactly resembling those he had seen in the Herculaneum paintings: "Small, square enclosures formed by trellis-work and 'espaliers,' and regularly ornamented with vases, fountains and caryatides, elegantly symmetrical and proper for the narrow spaces allotted to the garden of a house in a capital city." This tapestry could only have reproduced the garden of the period, for neither Pompeii nor Herculaneum had been excavated. We know in fact that Hentzner, who travelled in England in Queen Elizabeth's time, saw gardens very like those representations, "groves ornamented with trellis-work," "cabinets of verdure," whole walls covered with rosemary, marble columns and fountains, all reminiscences of classical times.

Le Nôtre, who had studied painting, utilized what was best in the efforts of his predecessors, aiming above all things at unity of design, whence his acknowledged superiority and the credit he often receives of having initiated the style. In the Roman days, as well as in later times, the box was chiefly used for the purpose of clipping, but the laurel, the cypress, the myrtle, and the pitch-tree were sometimes treated in the same way, and the ivy was made to cover the trees and walls. Pliny's gardens were elaborately laid out in this fashion. "In front of the portico," he writes, "is a sort of terrace, edged with box and shrubs cut into different shapes. You descend from the terrace by an easy slope adorned with the figures of animals in box, facing each other, to a lane overspread with the soft and flexible acanthus; this is surrounded by a wall enclosed with evergreens shaped into a variety of forms. Beyond it is the *gestatio* laid out in the form of a circus running round the multiform box hedge and the dwarf trees which are not quite close. The whole is fenced in with a wall completely covered by box cut into steps all the way up to the top." The Elder Pliny describes how the cypress was manipulated: "For a long time it was only used for marking the intervals between rows of pines; at the present day, however, it is clipped and trained to form hedgerows or

else is thinned and lengthened out in the various designs employed in ornamental gardening to represent scenes of hunting, fleets and various other objects; these it covers with a small leaf which is always green."

It scarcely required the testimony of Pliny to convince us that this *ars topiaria*, or art of ornamenting the gardens, was a growth of Roman soil and not of Greek origin. With the increasing luxury in the latter days of the Republic, when the Romans began to build villas all round the Bay of Naples and on other beautiful sites, the taste for gardening had greatly increased. The old idea that the garden was for utility only was superseded by an excessive love for ornamental gardening which developed—probably under Oriental influences—into the *ars topiaria*. It was said to have been invented by Caius Matius, surnamed Calvena, a man of noble character and varied accomplishments, the friend of Julius Cæsar, Cicero and Augustus. He is best known by the beautiful letter he wrote to Cicero after the murder of Cæsar; he is believed to have translated the Iliad into Latin; he wrote a book on cookery and he gave his name to the Matian apple. The very name of the ornamental gardener, *topiarius*, and the fact that Pliny in his Natural History specially distinguishes those plants which were suited for this kind of gardening, show how general the practice was. Lucius, the contemporary of Matius, reproduced it in his paintings, and examples of it have been found on the Pompeian walls. At the same time the unconventional beauties of Nature were not lost sight of. In Pliny's villa the two aspects were brought into sudden juxtaposition to set off better the merit of each.

The Romans had received most of their cultivated plants, like all that was best in their civilization, from the Greeks who had themselves imported them from Asia. Little is known of early Greek gardening beyond the Homeric legend of the gardens of Alcinoüs, where the flowers never faded and the trees gave their fruit all the year round; Herodotus also speaks of the garden of Midas, son of Gordias, full of fragrant wild roses with sixty leaves. Gardening in Greece was greatly stimulated by Alexander's campaigns, which made the Greeks acquainted with a new vegetation and with the celebrated gardens of

the East. Pliny describes the trees which created the admiration of the conqueror of this new world, and Diodorus of Sicily relates how he turned out of his way in his march from Celenæ to the Nisæan plains to look at the gardens of Semiramis at the foot of Mount Bagistanus. The first botanical garden was subsequently founded at Athens by Theophrastus, the disciple and successor of Aristotle and the earliest known writer on botany; while private gardens came into use through Epicurus, who is said to have been the first to possess one. At the same time many attempts at acclimatization were made in various parts of Alexander's Empire, whence the plants passed into Italy. The worship of trees had been from the earliest time a great factor in the distribution of plants, as without the tree which the divinity had selected for himself, no temple could be erected to him, nor could his religious rites be performed. Thus the oak was sacred to Zeus, the laurel to Apollo, the olive to Athene, the myrtle to Aphrodite, the poplar to Heracles; and wherever the worship of these divinities was carried, a cutting from the holy tree of their temple had to be planted. These attempts were of course not always successful. Pliny relates on the authority of Theophrastus that Harpalus (Governor of Babylon under Alexander) vainly tried to naturalize the ivy, the plant of Bacchus, in Media, and he elsewhere mentions that at Panticapæum near the Cimmerian Bosphorus (now Kertch in the Crimea), Mithridates and the inhabitants of the place made unsuccessful efforts to cultivate the myrtle and the laurel for certain religious rites. Sometimes, according to tradition, gods had planted their own sacred trees; Demeter brought the first fig-tree to Attica, Athene planted the olive on the Acropolis at Athens, and Aphrodite the pomegranate at Cyprus. The sacred trees and groves where the divinities dwelt afforded, like the altar, protection and right of asylum and were in their turn protected from injury and might not be cut down. Where the tree prospered, the god grew in favor. Sophocles speaks of the sway Bacchus held over Italy, and there can be no doubt that the ascendancy of the Dionysian worship was owing to the volcanic soil of southern Italy being so peculiarly favorable to the culture of the vine. "In this blessed country Campania," writes

Pliny, "rise those hills clad with vines, the juice of whose grape is extolled all over the world; this happy spot where, as the ancients used to say, Father Liber and Ceres are ever striving for the mastery."

The vine, the olive, the laurel, the myrtle, the fig, the pomegranate, the quince, the rose, the lily, the violet, had all probably been introduced into Italy at an early period by the Greek colonists.\* The cypress, called by Pliny "an exotic difficult to naturalize," is believed to have come in somewhat later. Among the earliest plane-trees were those brought over from Sicily by the elder Dionysius and planted in his garden at Rhegium, where they were looked upon as a great curiosity, but did not thrive. The plane-tree was famous throughout Greek antiquity, interwoven with many myths and sung by many poets. It was also much valued for its shade by the Romans, who in the latter days of the Republic planted it extensively in their villas and gardens. There existed a superstition that wine was nutritious to their roots, and a story is told of the orator Hortensius asking Cicero to take his turn in the law-court, because he had to go and give wine to his plane-trees at Tusculum. The leafless trunk of the plane-tree appears in the beautiful mosaic of Alexander's battle found in the house of the Faun, and now in the Naples Museum. The date palm, which belongs essentially to hot climates, did not find in Italy suitable conditions to fulfil its destiny. It lived and gave an Oriental beauty to the scene, but became sterile. The dates found in the Scavi were probably imported from Africa, for even Sicily lies outside the zone where they habitually ripen, and the limits of the fructifying palm were exactly the same in ancient times as they are now. The palm-tree probably came to Italy with the worship of Apollo, to whom Latona had given birth under the famous palm-tree at Delos, but its name, *palma*, which is derived according to Hehn from the Semitic *tamar*, shows that it must have first become known to the Romans through a different source. The earliest date with which the existence of the palm-tree in Italy can be connected is 291 B.C., when during a

\* This must be understood of the cultivated plants only, for the vine, the myrtle, and the laurel grew wild in Southern Europe.

pestilence in Rome the snake brought over from the temple of Æsculapius at Epidauris is said to have glided out of the ship, on arriving at Antium, and to have wound itself round the palm-tree in the sacred grove of Apollo; after having remained there three days it quietly returned to the ship, which continued its voyage to Rome. The oleander, the rhododendron, rhododaphne, or *nerium* of the Greeks and Romans—so frequently seen on the Pompeian walls,—is not mentioned in Greek literature, and not in Roman literature till Virgil. Hehn believes that it came from Asia Minor into Greece after Theophrastus's time, and did not pass into Italy till much later. It was first cultivated in gardens, but it soon began to grow wild by the sides of streams, where it had free play, as sheep and goats would not touch it on account of its being poisonous to them—a fact already mentioned by Pliny. It is now so common that it has been thought to be indigenous in Italy.

The peach, the apricot, and the melon did not come into Italy till the first century of the Christian era. The peach (the *malum persicum*, or Persian apple of the Romans) is, according to A. de Candolle, a native of China as well as the apricot, which Pliny calls *præcocia*, and which was believed to have come from Armenia. The same botanist shows that the pomegranate (the *malum punicum* or *granatum* of the Romans) is a native of Persia and of a few adjacent countries, and not of North Africa; and that the cherry, brought to Italy by Lucullus from Pontus in 64 B.C., was probably an improved variety of a tree which existed in Italy long before. A cut melon found among the fruit painted on the Pompeian walls, and also a representation of a melon in an ancient mosaic in the Vatican, have proved conclusively that the melon of the Romans was the same as ours—a fact for a long time disputed. De Candolle remarks that its quality was probably inferior, as the ancient writers give it but faint praise. Dr. Comes assumes that the *cucumis* which was cultivated under glass for the Emperor Tiberius, was the melon, but this is very doubtful, and it was more probably the cucumber. The native regions of the melon were India and Western Africa.

Dr. Comes gives an interesting account of the plants represented on the Pompeian

frescoes and in the mosaics, or found, like the bean and the walnut, solely in the excavations. He has recognized about fifty kinds. Schouw, who had gone over the same ground previously, mentions a few which Comes has not been able to identify, but Comes has found a larger number. The fruit and flowers in the representations of still life are executed with great fidelity; where they are introduced as ornaments or accessories they are not so easily recognized, as the decorators of the latter period gave free scope to their fancy, and made Nature entirely subservient to art. In the celebrated Flower Gatherer, for instance, found at Gragnano, and now in the Naples Museum, the plant from which she gathers the flowers has been drawn not from Nature, but from the imagination of the artist.

The vegetation in Italy was much more limited then than at present. In the days of Virgil and Pliny, even as now, the vine "married to the elm," or in Campania to the poplar, hung in festoons from tree to tree, and the pale green of the olive blended with the soft blue sky, but the orange and lemon-trees, now so inseparably associated with Italy, were absent. They were unknown to the Greeks and Romans. The lemon, which came originally from India through Persia and Arabia, was not cultivated in Europe till about the middle of the thirteenth century. The bitter orange, also a native of India, had come into Europe a century and a half earlier, when it was first cultivated in Sicily. Both were most likely introduced by the Arabs. The sweet orange was, according to some authorities, brought from China by the Portuguese in 1548. De Candolle, however, believes this was only an improved species, and that the fruit had already come into cultivation in Europe in the fourteenth century. The citron tree, a native of India, first seen by the Greeks in Persia and Media during Alexander's campaigns, and described by Theophrastus, probably became acclimatized in Italy in the third century of the Christian era. Virgil, in the *Georgica*, describes it as a foreign fruit-tree, and Pliny speaks of vain attempts that had been made to transplant it, saying that in his time it only grew in Media and Persia. It is, therefore, an anachronism to suppose that any of these fruits could have represented to the ancients the golden apples

from the garden of the Hesperides, with which the citron was afterward sometimes identified. Pliny speaks of a kind of quince called the *chrysomela* (golden apple), and it is probable that the apples of the Hesperides and of Atalanta were nothing but idealized quinces, the only golden apples known to the ancients. Dr. Comes shows that this is corroborated by the fact that the Hercules Farnese holds three quinces in his hand. The quince, like the apple and the pomegranate, was dedicated to Aphrodite. They all came under the denomination of apples, and the quince was called the cydonian apple because the best came from Cydonia, in Crete. It had, according to Solon's Laws, to be tasted by the bride before marriage. In poetry, it is frequently used as a metaphor, as in some pretty lines of Leonidas of Tarentum in the Greek Anthology. On the Pompeian frescoes there are two representations of a bear eating a quince, and the quince also appears in the mosaic of the house of the Faun.

Among the fruit which are generally represented in the *triclinia*, we find the peach, the melon, the gourd, the pumpkin, the fig, the almond, the pomegranate, the grape, the cherry, the date, the pear, and the apple. The peach, which had not been long introduced into Italy in Pliny's time, and was still a rare and expensive luxury, only appears once, in the house of Sirieus. The *salve lucru* (m) in mosaic letters on the threshold of this house, has led to the supposition that the owner was a merchant, and the decorations and objects found in it showed that he was a wealthy man who liked surrounding himself with the luxuries of life. The asparagus was found represented on the wall of the *triclinium* of the Casa del Gallo. This was an indigenous plant, already cultivated with great care in Cato's time. Pliny praises the kind that grew wild in the island of Nesis off the Campanian coast.

The flora of the Greeks and Romans was much less varied than ours, but they cultivated flowers in great profusion, and they used them largely for making garlands. These were woven either of leaves or flowers, and the flowers were chiefly roses and violets. They were used for religious and funeral purposes, for rewarding the brave, crowning the victors in games, as love offerings, and they were

worn in the temples and at the banquets. The Romans distinguished between the *corona* and the *serta*, the latter representing chiefly the garlands or festoons for decorating altars, doors, and drinking vessels. A good example of the *serta* may be seen sculptured on a Pompeian tomb known as the tomb of the Garlands.

The tradition about the origin of the banqueter's wreath was that it had originally been worn as a tight band round the head to avert the effects of wine-drinking, and that the first wreath had been made of ivy and worn by Bacchus himself, for which reason the ivy was dedicated to Bacchus. Alexander the Great returned from India crowned with ivy in imitation of Bacchus, the conqueror of India. According to another tradition, wreaths were worn in remembrance of the chains of Prometheus. Strict laws among the Romans forbade their being worn indiscriminately on all occasions. Pliny tells the story of a banker, L. Fulvius, who was imprisoned by order of the Senate for having at the time of the Second Punic War looked down from the balcony of his house into the forum with a chaplet of roses on his head. It was customary to approach the gods with a crown on the head because, according to Aristotle, no mutilated gift could be offered to the gods but only such as were perfect and complete, and crowning anything indicates completing it. At the banquets wreaths were provided by the host, who thus did honor to his guests. As a crown on the head expressed the fulness of life and joy, it was out of place in the house of mourning.

The Greeks and Romans carried a great refinement into the art of garland-making. They studied the language of flowers and how to blend the perfumes as well as the colors. This art had been developed by the Greek flower-girl Glycera and the painter Pausias in their ingenious contest to outvie each other in the most subtle expression of the beautiful, she, in plaiting the wreaths, he in reproducing them in painting, "a contest," says Pliny, "in reality between Art and Nature." Sometimes wreaths were worn round the neck that the wearer might enjoy the perfume more, and roses were scattered over the table for the same purpose. An illustration of this may be seen in one of the lately excavated houses at Pompeii, the

Casa del Simposio, where there are three representations of a *symposium*; the floor and table are strewn with rose-leaves, and one of the guests wears a red garland round his neck. The utmost refinement of luxury consisted in sewing together the petals of the roses alone—the *corona subtilis*. A perfect wreath of this kind was found last year by Mr. Flinders Petrie in the ancient cemetery of Hawara in Egypt. The *lemnisci*, or ribbons made of the delicate membranes of the lime-bark, were attached to the wreaths.

The rose was in antiquity, as it is now, the queen of the garden, and Campania was the land of roses. It was represented on the coins of Rhodos, Paestum, Neapolis, Cyrene, and other places famous for the flower. The cultivated rose was one of the few double flowers known to the ancients. It had come to the Greeks from Media, and can be traced through Phrygia, Thrace, and Macedonia. Athenæus quotes from the poet Nicander :

The poets tell  
That Midas first, when Asia's realms he left,  
Brought roses from th' Odonian hills of  
Thrace,  
And cultivated them in th' Emathian lands,  
Blooming and fragrant with their sixty petals.

Emathia was part of Macedonia, and the rose garden of Midas was, according to Herodotus, at the foot of Mount Bermion in Macedonia.

Every flower and tree in antiquity had its myth, and was dedicated to some divinity. The rose had, according to one legend, sprung from the blood of the dying Adonis; according to another the white rose had been colored red by the blood of the goddess Aphrodite herself when she ran through the thorns to succor her favorite. The symbol of all that is most beautiful, most enjoyable, and most perishable, it was dedicated to Aphrodite, and it was also the flower of Dionysus in his double character of the god of blooming nature and the god of the under-world, the mystic form in which his worship had come with the Greek colonies from the Peloponnesus into Southern Italy. It was the flower of the feast and the flower of the tomb. The best authorities consider it almost impossible now to identify the roses of the ancients. Theophrastus mentions that in his time, the inhabitants of Philippi in Macedonia were cultivating the *rosa centifolia*, which they had trans-

planted there from Mount Pangæus, where it grew in great abundance. Pliny says that the rose which flourished best in Campania was also the *centifolia*, but his descriptions of the roses, though no doubt intelligible to his contemporaries, are very perplexing to modern botanists, and some of them have even doubted whether the ancients knew the *centifolia* of the present day. Schleiden believes the rose of Midas was the *rosa gallica*, the earliest rose cultivated in Greece, and now growing wild there. Comes identifies the rosebuds on the Pompeian walls with the damask rose, which Sprengel believed to have been the celebrated rose of Paestum that blossomed twice in the year. Other authorities think that the damask rose did not come into Europe till the time of the Crusades, or even later. The demand for roses was so great in the days of Martial, that in winter the Romans cultivated them under glass or imported them from Egypt, which, on account of its beautiful climate, had proved a fruitful soil for the acclimatization of plants when the Ptolemies had carried Greek culture thither.

The Florentine and the German iris, the yellow water-iris, the narcissus, the daffodil, the hollyhock, the red corn-poppo, the reed, the corn-flag, the *aster amellus* or Italian starwort, "that grew by the winding streams of Mella," the corn-cockle, the ox-eye, the aloe, the soft acanthus, the laurel of Alexandria, the Indian millet, the wheat, are all represented either on the Pompeian walls or in the mosaics. The tamarind, the papyrus, and the lotus flower appear only in the Egyptian scenery. Among the trees on the walls are the oak, the chestnut, the stone pine, the cypress, the laurel, the myrtle, the olive, the ivy, the vine, the palm, the plane, the gum arabic, the black mulberry, and the cherry tree. The importance the Romans attached to their gardens implies that the gardener was a person of some consequence, and we learn from Cicero that the *topiarii* ranked among the superior slaves. Hehn and Friedländer give good reasons for believing that the Roman gardeners were chiefly Orientals. At the very time when Roman power and luxury were in the ascendant, Italy was overrun with Semitic slaves, who were better suited than those of any other race for the servile condition. Their gentleness, and patience, their peaceful, laborious tastes,

while rendering them unfit to be soldiers and gladiators, eminently qualified them for domestic service, and especially for the care required in tending plants. Moreover, gardening in the East was held in great esteem, whence the Greek proverb, "There are many vegetables in Syria." Born and bred among such traditions they had brought with them a natural taste, a superior knowledge and aptitude highly useful to the Romans in their attempts at acclimatization. They had been trained in the arts of grafting, of creating new species by judicious selection, of turning every sport of Nature to account, and even of dwarfing the trees—an art which is now carried to such a high degree of perfection in Japan. Virgil's old man of Tarentum, who had made the wilderness blossom like the rose, was himself from Corycæus in Cilicia, the country adjoining Syria.

Amid the passing fashions of a luxurious age Virgil's picture of the old Corycian's garden stands out in immortal beauty and simplicity: "I remember that under the lofty turrets of Æbalia, where black Galesus moistened the yellow fields,

I saw an old Corycian to whom belonged a few acres of neglected land not rich enough for the plough, nor fit for grazing, nor kindly for vines. Yet here planting among the bushes a few pot-herbs, white lilies, vervain and slender poppies, he matched in his content the wealth of kings; and returning late at night was used to load his board with unbought dainties. He was the first to gather the rose in spring and fruit in autumn; and even while stern winter was still splitting the rocks with cold and bridling the rivers with ice, in that very season he would pluck the tender hyacinth, chiding the late spring and the lazy zephyrs. His teeming bees were the first to swarm, he was the first to strain the frothing honey from the pressed combs: abundant limes and pines were his, and for every blossom the fertile tree had borne in early spring, it bore fruit in autumn ripeness. He also was the last to plant out his elms and pear-trees when they had hardened, and the sloes already bearing plums, and the planes grown broad enough to shade the feast."

—*Macmillan's Magazine.*

#### CHANT DE GOLIAS.

BY D. MONTGOMERIE RANKING.

With silver strings my lute I strung,  
To silver speech I tuned my tongue,  
Of one alone the praise was rung:

*Never a maid may wrestle time;*

But she, the cold light of whose eyes  
Taught all my tide of life to rise,  
Passed on, nor heeded anywise!

*Rose hath canker, and Christmas rime.*

The moon hath waning and eclipse,  
The tide leaps light that sunlight tips,  
And cold eyes veil to burning lips:

*Never a maid may wrestle time;*

And still of love is all my lay,  
Light o' love for a summer's day:—  
Come, kiss me, widow, wife, or may!

*Rose hath canker, and Christmas rime.*

—*Gentleman's Magazine.*

## THE ORIGIN AND HISTORY OF MURRAY'S HANDBOOKS FOR TRAVELLERS.

BY JOHN MURRAY.

I HAVE no desire to intrude myself before the Public, and as regards the subject of Handbooks for Travellers I have never put forward any statement of my claims as author and originator of them. Having been requested, however, to give some account of the origin of Murray's Handbooks, I have consented to do so the more readily after reading an article recently contributed to the *Pall Mall Gazette* on the subject of Baedeker's Guides.

The writer of that article would appear to claim for Mr. Baedeker the credit of inventing this class of work, and he entirely ignores the existence of Murray and his Handbooks for Travellers, omitting all allusion to them. Now there are already in existence twenty-nine of my Handbooks—including the Handbooks to the Cathedrals—dealing with the British Islands alone; and if the compiler of a new Guide to Great Britain has in no case made use of this mass of material, he has exhibited a remarkable example of forbearance and abstinence.

No doubt the Editor of such a book would be called upon to travel over a considerable part of the country himself, and in dealing with a vast number of facts, and of matters liable to constant change, he could not fail to find much to correct and supplement in the work of his predecessors; but the claim of originating this species of Literature, and of having brought it to "the level of a fine art," which the writer in the *Pall Mall* broadly asserts on behalf of Messrs. Baedeker, would, I feel sure, be repudiated by them, since at the outset of their series they acknowledged once and again the obligations they were under to Murray; not only confessing that they made his Guides the basis and framework upon which their own were founded, but that in some instances they directly translated from his work.

In consequence of this challenge, however, I feel bound not to allow myself to be deprived of what credit attaches to me as the author, inventor, and originator of a class of works which, by the invariable testimony of Travellers, during more than half a century, have been of the greatest utility and comfort to them—which, in

fact, may be said to have had no little influence in producing the result of "Travelling made easy."

Since so many thousands of persons have profited by these books, it may be of some interest to the public to learn their origin, and the cause which led me to prepare them. Having from my early youth been possessed by an ardent desire to travel, my very indulgent Father acceded to my request, on condition that I should prepare myself by mastering the language of the country I was to travel in. Accordingly in 1829, having brushed up my German, I first set foot on the Continent at Rotterdam, and my "Handbook for Holland" gives the results of my personal observations and private studies of that wonderful country.

At that time such a thing as a Guide-book for Germany, France, or Spain did not exist. The only Guides deserving the name were: Ebel, for Switzerland; Boyce, for Belgium; and Mrs. Starke for Italy. Hers was a work of real utility, because, amid a singular medley of classical lore, borrowed from Lemprière's Dictionary, interwoven with details regulating the charges in washing-bills at Sorrento and Naples, and an elaborate theory on the origin of *Devonshire Cream*, in which she proves that it was brought by Phœnician colonists from Asia Minor into the West of England, it contained much practical information gathered on the spot. But I set forth for the North of Europe unprovided with any guide, excepting a few manuscript notes about towns and inns, &c., in Holland, furnished me by my good friend Dr. Somerville, husband of the learned Mrs. Somerville. These were of the greatest use. Sorry was I when, on landing at Hamburg, I found myself destitute of such friendly aid. It was this that impressed on my mind the value of practical information gathered on the spot, and I set to work to collect for myself all the facts, information, statistics, &c., which an English tourist would be likely to require or find useful. I travelled thus, note-book in hand, and whether in the street, the *Eilwagen*, or the Picture Gallery, I noted down every fact as it oc-

curred. These note-books (of which I possess many dozens) were emptied out on my return home, arranged in Routes, along with such other information as I could gather on History, Architecture, Geology, and other subjects suited to a traveller's need; and, finally, I submitted them to my Father. He had known nothing of my scheme, but thought my work worth publishing, and gave it the name of "Handbook," a title applied by him for the first time to an English book. But these Routes would have been of comparatively little value, except for the principle and plan upon which they were laid down. I had to consult the wants and convenience of travellers in the order and arrangement of my facts. Arriving at a city like Berlin, I had to find out what was really worth seeing there, to make a selection of such objects, and to tell how best to see them, avoiding the ordinary practice of local Guide-books, which, in inflated language, cram in everything that can possibly be said—not bewildering my readers by describing all that *might* be seen—and using the most condensed and simplest style in description of special objects. I made it my aim to point out things *peculiar* to the spot, or which might be better seen there than elsewhere. Having drawn up my Routes, and having had them roughly set in type, I proceeded to test them by lending them to friends about to travel, in order that they might be verified or criticised on the spot; I did not begin to publish until after several successive journeys and temporary residences in Continental cities, and after I had not only traversed beaten Routes, but explored various districts into which my countrymen had not yet penetrated.

I began my travels not only before a single railway had been begun, but while North Germany was yet ignorant of Macadam. The high road from Hamburg to Berlin, except the first 16 miles, which had been engineered and macadamized by an uncle of mine by way of example to the departments of Ponts et Chaussées, was a mere wheel track in the deep sand of Brandenburg. The postilion who drove the mis-called Schnell-post had to choose for himself a devious course amid the multitude of ruts and big boulders of which the sand was full, and he consumed two days and a night on the dreary journey. In those days the carriage of that

country (the *Stuhlwagen*) was literally a pliable basket on wheels, seated across, which bent in conformity with the ruts and stones it had to pass over.

On reaching Weimar, having been favored with an introduction to Goethe, the great poet and philosopher of the time, I had the honor and pleasure of a personal interview with the hale old man, who received me in his studio—decorated with casts of the Elgin Marbles and other works of Greek art,—attired in a brown dressing-gown, beneath which shone the brilliant whiteness of a clean shirt; a refinement not usual among German philosophers. On this occasion I had the honor of presenting to Goethe the MS. of Byron's unpublished dedication of *Werner* to him. Later on—after a brief interview with Prince Metternich, to whom I was presented by Baron von Hammer in Vienna, an acquaintance renewed afterward when the Prince was an exile in England—I set foot in Hungary, where I had the great pleasure of becoming acquainted with the enlightened patriot Count Szechenyi, who had just completed his grand design of steam navigation on the Danube. I was among the first to descend the Danube from Pesth to Orsova below Belgrade, near the spot where the river, having previously spread out to a width of five miles, is compelled to contract to 300 or 400 yards, in order to rush through a narrow gorge, or defile, split right through the range of the Carpathians, for its escape toward the Black Sea. In a timber barge I swept over the reefs and whirlpools in its bed, not yet fit for steamers to pass, admiring the wondrous precipices descending vertically to the water's edge, as far as to the Iron Gate. All this is described for the first time in my Handbook, as well as the "writing on the wall" left by the Romans under Trajan, in the shape of two rows of put-lock holes, continued for 12 miles along the face of the precipice, made for the wooden balcony road by which the invincible Romans had rendered this "impassable" passable and practicable for their armies. It is worthy of remark that from the days of Barbarian invasion which swept away the road, none other existed on this spot until 1834-35, when the Austrian Government blasted a highway through the limestone cliff along the left bank of the Danube. My explorations ended at the Turkish frontier of Wal-

lachia, which was not to be overstepped in those days without the penalty of six weeks in quarantine. I had already passed the Hungarian military frontier, and its line of outposts like our coastguard, and had penetrated into Carinthia and Carniola, where I visited the almost unknown cave of Adelsberg, with its subterranean lakes and fish without eyes, and I descended the quicksilver mine of Idria, in which it is death to work more than six hours in a week underground. I have especial pleasure in remembering that the first description, in English, of the *Dolomite Mountains* of Tyrol, not a scientific one (Murchison and Sedgwick were before me), appeared in my "South Germany," first edition. I explored those scenes of grandeur in company with a geological friend in 1831-32. Thousands of my countrymen now follow my advice and my footsteps yearly.

On another occasion, while travelling through Bohemia, I paid a visit to Konigswart, the family seat of Prince Metternich, partly for its owner's sake, partly on account of a Natural History Collection deposited in it, which I found described in one of Goethe's miscellaneous works. He became interested in it on account of its founder, one Huss, an intelligent, educated, and upright man, whose fate it was to be "The Headsman of Eger." It was an hereditary office, handed down to him from a long line of ancestors, but it came to pass that Eger was stripped of its criminal jurisdiction, so the headsman's occupation was gone. The Prince hearing of this, not only generously purchased the collection, but in order not to separate the owner from his treasures when transporting it to Konigswart, made him its custodian with a pension for life. I was shown round the Museum by Mr. Huss himself, a mild-looking old gentleman, and found that besides specimens illustrating the geology and natural history of Bohemia, it contained many historic relics of the Metternich family of great interest, among them a series of wine-glasses rising from two to four feet each, blown on the elevation in rank of a member of the family, that his health might be drunk out of it. Here were flails and scythes, the rude weapons of the Bohemian peasants used in the Hussite War; the rings of John Sobieski and Matt Corvinus, and Napoleon's washhand-basin brought from Elba.

All these were pointed out to me by my guide; but I observed that he passed over a glass-case which attracted my attention, as containing three swords. I called him back, and was then informed that the central one was the dress-sword of Louis XVI., and the two broad blades which flanked it were the Eger executioner's official swords: one was made at Sohligen and the other at Ratisbon, and they looked very sharp. Perceiving that I had not come to scoff at him and his profession, he became communicative, and reminded me that to die by the sword was a privilege of the noble Roman denied to the common herd of criminals.

The first of my Handbooks to the Continent, published 1836, included Holland, Belgium, and North Germany, and was followed at short intervals by South Germany, Switzerland—in which I was assisted by my good friend and fellow-traveller William Brockedon, the artist—and France. These were all written by me; but, as the series proceeded, I was fortunate enough to secure such able colleagues as Richard Ford for Spain, Sir Gardner Wilkinson for Egypt, Sir Francis Palgrave for North Italy, Dr. Porter for Palestine, Sir George Bowen for Greece, Sir Lambert Playfair for Algiers and the Mediterranean, Mr. George Dennis for Sicily, &c. In 1839 appeared the first of Baedeker's long series of Guides, that for Holland and Belgium, written in German. The Preface contained an acknowledgment of the compiler's obligation to "the most distinguished (*ausgezeichnetste*) Guide-book ever published, 'Murray's Handbook for Travellers,' which has served as the foundation of Baedeker's little book." \* He

\* I give a few extracts taken from one or two of Baedeker's Guides:—

"Aus Grundlage hat diesem Werken das ausgezeichnetste Reisehandbuch, welches je erschienen ist gedient 'Murray's Handbook for Travellers on the Continent.'"—Baedeker's "Handbuchlein: Holland," 1839.

"Die Brauchbarkeit der von dem Buchhändler Murray zu London herausgegebenen Reisehandbücher ist eine von den Engländern, dem unter allen vorzugsweise Reisenden Volke, so anerkannte Thatsache, dass man kaum einen derselben ohne das sogenannte 'rothe Buch' umherwandern sieht. Sie führte den Herausgeber des vorliegenden Handbuchs früher schon auf die Idee, zwei in Deutschland, trotz der Nachbarschaft, wenig gekannte Länder nach jenen Murray'schen Handbüchern für Reisende zu beschreiben

began his Guide to Germany, published 1842, by again referring to Murray's Red Book as having "given him the idea of his own, though as his work progressed, he found he could retain only the frame of his original." No doubt, with my book ready made to hand, he was enabled to use the plan and arrangement, to correct, enlarge, and fill in with such information as he thought useful to Germans, as for instance by sedulously pointing out where the best *Bierstuben* were to be found. The acknowledgment of obligation amounts to this: "in my first edition I copied, extracted, and even translated freely from Murray's books. As I proceeded I found I was able to do without them." Still fragments of translated passages long survived, and may be even now detected by such a blunder as the following. In one of the southern Swiss valleys Murray says "the slate rocks here are full of red *garnets*," rendered by B. "are overgrown with red pomegranates," a mistake which runs through many editions, but which I find corrected in that of 1873. Nineteen travellers out of twenty would have passed the garnets unnoticed; the accident of my having devoted some time to the study of geology caused me to notice the garnets, a not unusual occurrence in slate rocks. Throughout the Handbooks may be traced other results of my private reading, which stamp a special

character on these books. My taste, studies and predilections mark the originality of my writing, and it is impossible but that any one following and picking up my threads one after another should not betray himself as a copyist.

Messrs. Baedeker have long ago proved how easy it is with a book ready printed and published to produce another book on the same subject and identical in plan—availing themselves of its information, sending them out in the *same Red Cover*, yet not infringing the laws of copyright. I do not complain of them—they were legally entitled to do what they have done; but after they have dogged my footsteps from one country to another—through Holland, Belgium, Germany, France, Switzerland, Italy (North and South), Greece, Syria, Egypt, England and Scotland—I was surprised to find one of their compilers sinking my name and existence altogether, and claiming for them the merit of originating this class of Handbooks.\*

I will, therefore, in winding up my statement, content myself with this remark, that although Messrs. Baedeker have brought out some eighteen different Guide-books, every one of them has been preceded and anticipated by a Murray's Handbook for that particular country.—*Murray's Magazine*.

## MYTHS OF THE GREAT DEPARTED.

### A STUDY IN LEGENDARY FOLK-LORE.

BY C. S. BOSWELL.

THE most superficial student of folk-lore and tradition cannot fail to be struck by the constant recurrence, in regions the

und nach ähnlichem Plane eine bekannte Rheinreise zu bearbeiten."—Baedeker's "Handbuch für Reisende durch Deutschland," 1842.

My copy of this work contains the following inscription in Herr Baedeker's own writing:—

"An Herrn Murray richtet dieses Buch in dankbarer Anerkennung der grossen Hilfe welche bei Abfassung desselben die vortrefflichen Reisebüchern 'Northern and Southern Germany' gewährt haben mit der bitte um ferneres Wohlwollen der Herausgeber,

"K. BAEDERER."

"Coblentz, Aug. 1841."

most remote from each other, and among the most diverse races, of certain myths, legends and *märchen*, not merely identical in their more essential features, for this might be accounted for by the identity,

"Das vorliegende Buchlein erschien, auf das berühmte Murray'sche 'Handbook for Travellers on the Continent' gegründet zum erstenmale vor zehn Jahren,"—Baedeker's "Holland," 1851.

"Die Grundlage bildet auch hier Murray's berühmtes Reisehandbuch."—Baedeker's "Die Schweiz," 1851.

\* The late Dr. Porter complained to me seriously of the use made of his "Syrian Handbook" by the German Baedeker, without any acknowledgment.

all over the world, of that subsoil of human nature in which tradition takes root, but bearing a strong resemblance to one another, even in those minuter details which we might well expect to vary with the circumstances of time, place, and surroundings, or with the fancy of each narrator. Several explanations of this phenomenon have been suggested by the mythologists. Setting aside the theory of direct borrowing, which in many, perhaps in most, cases appears wholly untenable, the two most probable opinions are the following:—First, that human nature is everywhere essentially the same, and that this sameness appears in the products of the human intellect and imagination; secondly, that throughout the ages during which men have dwelt upon the globe, a constant interchange of traditions and beliefs has taken place among them, leading to the gradual but complete diffusion throughout all nations of the myths and traditions of each. Both of these agencies have, no doubt, been very largely at work; but, though sufficient to account for the sameness apparent in the broader features of these myths, they are altogether inadequate to explain that coincidence in point of detail to which we have before alluded—a phenomenon for which a satisfactory explanation yet remains to be found.

However, our present task is not to investigate the causes which have led to the universal diffusion of these world-myths, as they may be called, but to examine one single class of them, a class which yields to few, if any, in the favor it has enjoyed among all nations and in all ages. In every part of the world, and among peoples in every stage of civilization or barbarism, we find legends relating how some national hero or sage, at the end of his earthly career, is transported to some supernatural abode without having tasted of death. The story often concludes with a prophecy that the vanished hero shall some day come again to establish a reign of righteousness and prosperity among his people. This myth, in one form or another, exists among the Hebrews, Greeks, Romans, Hindus, Persians, Germans, Franks, Irish, Welsh, Cornish, Bretons, Danes, Finns, Aztecs, Algonquins, Hurons, and many other nations, both civilized and savage.

One of the best known or, at any rate,

most complete forms of this myth, is that of the German Emperor, Frederick Barbarossa, or *Rothbart*, who, tradition tells, is not dead, but dwells in a cavern in the heart of the Kyffhausen mountain, until the appointed time is come when he shall issue forth, and rule over a united Germany in power and might. He now sits within his mountain hall, asleep at the head of a massive stone table, through which his beard has grown, half waking, from time to time, to partake of food and drink, with which he is supplied by an old man, his attendant. His subterranean abode is not hermetically sealed; many have found it from time to time, or have been conducted thither by the old man who waits upon the slumbering monarch. These favored individuals generally seem to have been liberally treated, and dismissed with gifts of gold of ancient coinage, and wine such as they had never before tasted in the course of their lives. However, like most recipients of supernatural bounty, these persons oftener than not forfeited their gifts by their own misconduct. Whenever a stranger finds his way, or is led, into the hall, the Redbeard raises his head, and asks, "Do the ravens still fly about the hills?" And upon being told that they do, he rejoins, "Then I must sleep for another hundred years."

Mr. Patrick Kennedy\* records an Irish legend, which bears a remarkable likeness to that of the German Emperor. "Once upon a time," Gearoidh Iarla (*i.e.* Earl Gerald), a scion of the great house of Geraldine, was a mighty chieftain in Ireland—a lover of justice, and the mainstay of his countrymen in their resistance to English tyranny. He was also a great "medicine man," and possessed the power of transforming himself into any animal he pleased. His wife often wanted him to let her see him in some of these shapes, but he always refused to comply with her desire, alleging that, if she experienced any terror at such a time, some calamity would befall him, from which he would not recover until many generations of men had passed away. At length, however, he yielded to her importunities, and assumed the form of a beautiful goldfinch. The lady, though startled at first, was highly pleased by this demonstration of

\* *Legendary Fictions of the Irish Cells.*

her husband's power; when, suddenly, as the transformed Earl was charming his wife with his song and graceful flight, a hawk flew into the room. The Earl took refuge in his wife's bosom, pursued by the hawk, who, however, dashed against the table and fell dead; but the Countess, terrified by her husband's danger, uttered a loud scream. Immediately the Earl vanished from her sight and from the sight of men. "Himself and his warriors are now sleeping in a long cavern, under the Rath of Mullaghmast. There is a table running through the middle of the cave. The Earl is sitting at the head, and his troopers, in complete armor, down along both sides of the table, and their heads resting on it;" behind them stand their horses in their stalls, ready saddled and bridled. "When the day comes, the miller's son, that's to be born with six fingers on each hand, will blow his trumpet, and the horses will stamp and whinny, and the knights awake and mount their steeds, and go forth to battle." Then will the Earl rout the English in a great battle, and reign king of Ireland for two-score years. One night in every seven years, Earl Gerald issues forth from his cavern, and rides round the Curragh of Kildare. On this night the door of the cave stands open, and any one who can find it may enter in. About a hundred years ago a drunken horse-dealer actually did so. Startled by the unexpected sight, he dropped a bridle which he carried in his hands, whereupon one of the sleepers half raised his head, and asked, "Is it yet time?" The fellow had the presence of mind to reply, "Not yet, but it will be soon," and the trooper's head dropped again upon the table. When the Earl began his septennial rides, his horse was shod with silver shoes, half an inch thick; when these are worn as thin as a cat's ear the day of Ireland's deliverance is at hand. The last time the Earl was seen, his horse's shoes were no thicker than a sixpence!

This grand legend is remarkable for combining with the heroic myth a story of a much more primitive cast, in which the hero is endowed with the usual sorcerer's power of transforming himself into animal shapes—a power which he shares, not only with the gods of the Greek and Hindu mythologies, but also with the Australian *birraark* and North American

*bo-o-in*, and, indeed, with the medicine men of most rude tribes. In fact, the heroic legend would appear to have been grafted upon a story of much earlier date, a hypothesis which would explain the want of connection between cause and effect, apparent in the Earl's enforced seclusion, consequent upon the trivial incident of his wife's alarm.

According to another Irish legend, the giant Mahon McMahon, a contemporary of Finn MacComhal, sleeps with his followers in the recesses of Carrigmahon, county Cork. In this legend we find the incident of the sleeper's beard growing into the stone table, as in the Barbarossa story.\*

Bruce's invasion of Ireland sowed the seed of a plentiful crop of legends, one of which is pertinent to our present subject. It tells how the hero is not dead, but sleeps, surrounded by his chief warriors, in a cave under a ruin upon Rathlin Island, known as "Bruce's Castle," the entrance to which is visible once every seven years, as in the case of Earl Gerald. A man once found his way in, and saw on the ground at his feet, in the midst of the sleeping warriors, a sabre half-unsheathed. "On his attempting to draw it, every man of the sleepers lifted up his head, and put his hand on his sword." The man fled, but heard them "calling fiercely after him, 'Ugh! ugh! Why could we not be left to sleep?' and they clanged their swords on the ground with a terrible noise, and then all was still, and the gate of the cave closed with a mighty sound like a clap of thunder." When Bruce and his followers awake, they will unite Ireland to Scotland.†

Ireland is rich in traditions of vanished heroes. Of a different character from those just narrated is the story of the "Good O'Donoghue," a chieftain, who, in old times, ruled over the neighborhood of Killarney, renowned alike for prowess in war and for justice and beneficence in time of peace. The account of his disappearance is given by T. Crofton Croker as follows: "At one of those splendid feasts for which his court was celebrated, surrounded by the most distinguished of his

\* T. Crofton Croker, *Fairy Legends of the South of Ireland*.

† Lady Wilde, *Ancient Legends of Ireland*, i. 161.

subjects, he was engaged in a prophetic relation of the events which were to happen in ages yet to come. . . . In the midst of his predictions, he rose slowly from his seat, advanced with a solemn, measured, and majestic tread to the shore of the lake, and walked forward composedly on its unyielding surface. When he had nearly reached the centre he paused for a moment, then, turning slowly round, looked toward his friends, and, waving his arms to them with the cheerful air of one who takes a short farewell, disappeared from their view." The O'Donoghue had departed to the *Tir-n'an Oge*, that enchanted land of perpetual youth so well described by Mr. W. B. Yeats in his charming little collection of the "Fairy and Folk Tales of the Irish Peasantry." Every May-day morning he revisits the earth, but is seldom seen; when he is, it is a sign of good luck in general, and plentiful harvests in particular. He appears under different circumstances, and in various guise. Once, at sunrise, the eastern waters of the lake were suddenly agitated, though the rest of the surface remained smooth and unbroken. A great wave rushed foaming to the opposite shore, followed by the O'Donoghue, in full armor, with white plume and flowing scarf of light blue, and mounted upon a milk-white horse. He was accompanied by a vast concourse of youths and maidens, bound together with wreaths of spring flowers, and moving to the sound of delightful music. The whole band passed over the surface of the lake, and finally disappeared in the mist. The periodical visits of the O'Donoghue are generally accompanied by some act of beneficence, but he has not, so far as I know, any great destiny to fulfil in the future.

Passing to the kindred Celtic race inhabiting Wales, Cornwall, and Brittany, we find the same tradition. King Arthur, as everybody knows, did not perish in "that last weird battle in the west," when he slew his treacherous nephew, Mordred, by whom he was sorely wounded, but was carried away by the three weeping queens in their barge—

To the island valley of Avilion;  
Where falls not hail, or rain, nor any snow  
Nor ever wind blows loudly; but it lies  
Deep meadow'd, happy, fair with orchard  
lawns,  
And bowery hollows crowned with summer  
haze.

Lord Tennyson's exquisite narrative is founded, as is well known, upon authentic Welsh traditions, some of which have come down to us in their original form, and were familiar, in translations, to the romancers and poets of the Middle Ages. An old English ballad tells how Sire Lukyn (who answers to "the bold Sir Bevidere"), after having thrown Excalibur into the "rivere," and seen it caught and flourished by "a hande and an arme"—

Then hasten'd backe to tell the kinge,  
But he was gone from under the tree;  
But to what place he cold not tell,  
For never after hee did him spye;  
But hee sawe a barge goe from the land,  
And hee heard ladyes howle and crye.  
And whether the kinge were there or not,  
Hee never knewe, nor ever colde;  
For from that sad and direfulle day,  
Hee never more was seen on molde.

The Welsh, as Holingshed tells us, "believed that King Arthur was not dead, but conveyed awaie by the Fairies into some pleasant place, where he should remaine for a time, and then returne againe, and reign in as great authority as ever." The same tradition prevailed in Brittany, as we learn from a chronicle printed at Antwerp in 1493: "The Bretons supposen that he shall come yet, and conquer all Bretaine; for certes this is the prophycie of Merlin. He sayd that his deth shall be doubtous; and sayd soth, for men thereof yet have doute, and shullen forevermore, for men wyt not wether that he lyveth or is ded." The Breton tradition is, that the "island valley of Avilion," or Avalon, or Agalon, is to the north-west of Brittany. The Britons held it to be a valley near Glastonbury, where the tomb of Arthur used to be shown. The chivalric romancers related that King Arthur was sleeping in the enchanted palace of his sister, the Fata Morgana, which might be seen, on clear days, in the straits of Messina, opposite Reggio. The Cornish believe that the soul of the king has migrated either into a chough, in which form he sometimes hovers about the ruins of Tintagel, where once he held his court; or else in that of a raven, in which form he must remain until his second coming, or, as some say, until the day of judgment. Hence the Cornishmen are unwilling to kill a raven. The Cornish tradition bears the marks of extreme antiquity, and was probably applied to heroes of a date many ages anterior to that of King Arthur. For

the introduction of the raven, compare the Barbarossa legend, but the circumstances are so dissimilar that the mention of the same bird in both legends is probably a mere coincidence.

The Franks, according to one account, believed that Charlemagne was not dead, but that he slept within a vault of the cathedral at Aix-la-Chapelle, in the midst of priceless treasures, clad in robes of State, and with the Imperial diadem on his head.

In like manner, the Danish national hero, Olger Danske, is said to be yet alive, and to be sleeping within an enchanted castle, where he will sleep on until the hour of Denmark's sore need, when he will rise and vanquish all her enemies. At the battle of Copenhagen, in 1801, it was said that Olger was seen in the Danish fleet, fighting valiantly against the English.

We find the same tradition flourishing among Eastern nations. The Persian chroniclers tell how Jima or Yima, who has been identified by Eugene Burnouf with the Jemshid of the Shah-Nameh, fell, after a reign of great glory and magnificence, by reason of his presuming, like Herod, to arrogate to himself divine power and majesty. According to Firdausi, he was deposed by Zohak, captured, and sawn asunder. "According to the earlier traditions of the Avesta, Jima does not die, but, when evil and misery begin to prevail on earth, retires to a smaller space, a kind of garden of Eden, where he continues his happy life with those who remain true to him."\*

Khai-Khosrau, another Persian monarch, becoming, like the Emperor Charles V., weary of the vanity of empire, and the sinfulness of mankind, determined to devote himself to a religious life. Despite the remonstrances of his nobles, he made a sumptuous feast in the desert, which lasted for seven days, distributed liberal gifts among all the poor of his realm, appointed his successor, and took leave of his chieftains and counsellors. He then proceeded to a fountain in the desert, accompanied by a large band of warriors who still refused to leave him. Kai-Khosrau now bade his remaining followers farewell, and bidding them hasten away,

lest they should be overwhelmed in an approaching snowstorm, disappeared into the fountain. His followers remained for a while stupefied with amazement and grief; then, regardless of their king's warning, they tarried yet longer to refresh themselves with food and sleep. Then a furious wind arose, driving before it sheets of snow, and the followers of Kai-Khosrau were discovered, some time after, frozen stiff and dead.\*

The account given in the Talmud of the translation of Enoch appears to be a compound of the Persian legend of Kai-Khosrau and the Biblical account of the ascension of Elijah. Probably the former element was acquired during the captivity, a period which so greatly influenced Talmudic and Cabbalistic lore.

According to the Rabbis, Enoch reigned with justice and righteousness for 353 years in unbroken peace. In the 253rd year of his reign Adam died, and about this time Enoch felt come over him a great longing for a life of seclusion and meditation. He did not all at once abandon his active duties, but gradually withdrew himself more and more, until he only appeared before his people once a year. He now became so holy that the people feared to approach him, though they listened gladly to his teaching: and, when he had taught them fully concerning the ways of the Lord, an angel called to him and said: "Enoch, ascend to heaven, and reign over the children of God in heaven, as thou hast reigned over the children of God on earth." Then Enoch called together the people, and told them what had befallen him; but, before quitting them, he made them repeat the lessons he had taught them. Then he mounted his horse and departed on a seven days' journey, on each day taking leave of as many of his followers as he could induce to return; but some still clung to him. Now, on the seventh day, Enoch was carried up to heaven by a chariot and horses of fire, in the midst of a whirlwind: but such of his followers as had remained with him to the last never returned; and, when people went to seek for them, they found their bodies buried beneath masses of ice and snow.

The legends of Kai-Khosrau and Enoch say nothing of the future return of these heroes; but it will be remembered that

\* Spiegel, v. Professor Max Müller's *Science of Language*, ii. 568, n.

\* Firdausi, *Shah-Nameh*.

the Jews firmly believed that, before the coming of the Messiah, "Elias must first come, to restore all things," a prophecy which they understood in its literal sense.

The disappearance of Kai-Khosrau, Enoch and Elijah remind us of the apotheosis of Romulus, who, according to Roman tradition, was holding an assembly in the Campus Martius, when he was carried up to heaven in a sudden storm, there to become the god Quirinus.\* His story forms a connecting link between the purely heroic myths we have hitherto been examining, and the myths of those men and women, who, like Hercules, Minos, Rhadamanthus, Æacus, Ino, and many others among the Greeks, recruit the pantheons of most pagan nations by their apotheosis at or after death.

While speaking of Greek traditions, it may not be superfluous to refer to the prophecy in the *Odyssey* that Menelaus should not die, but should be sent by the immortals "to the Elysian plain, and the ends of the earth . . . where the means of life come most easily to men; there is no snow, nor violent storm, nor ever any rain;" but a clear west wind is always blowing from the ocean.†

Among the nations of the East, the myth often takes a different form, the hero being destined to return, not in his original shape, but in a fresh avatar. Herein we may discern the Oriental mystic and theosophic tendency, and the belief in metempsychosis, which has prevailed time out of mind in the East. The Brahmins state that Vishnu has already passed through nine avatars, namely, as a fish, a tortoise, a boar, a man-lion, a dwarf, the elder and younger Rama, Krishna, and Buddha. His tenth avatar, as Kalki, will be the last. He will then combat, and forever destroy, all evil and unrighteousness, and establish a reign of peace that shall never end.

According to the *Avesta*, Zoroaster is to return, at intervals of long ages, in the form of three prophets, to be miraculously born from his seed of so many virgins. The third of these prophets, the *Sosiosch*, is to appear at the end of the last age of the world, to vanquish Ahriman and the *Diws*, to banish all unrighteousness, and to establish a new heaven and a new earth.

The like myth is not less generally prev-

alent among less civilized nations than the foregoing. Among these more barbarous races, the vanished hero is generally a national deity, or deified hero, often the culture-deity. Thus, the Aztec tradition is that Quetzatcoatl, their culture-deity, described as a white man with a beard, came to them across the sea from the East. He dwelt among them for several years, instructing them in laws, religion, and the arts; then he sailed away again into the East, in a boat covered with serpents' skin. Before his departure, however, he promised to come again, and reign over Anahuac in peace and prosperity. The expectation on the part of the Aztecs that Quetzatcoatl would return, proved of material service to the Spaniards upon their first arrival in Mexico, for the natives, until they were miserably undeceived, took Cortes for their beneficent god, returned according to his promise. Many attempts have been made to give a basis of historic truth to this myth, and to derive it from some former discovery of Mexico by Europeans. These early voyagers have been variously supposed to have been Norsemen, Irish or Welsh; the tradition of the Welsh prince Madoc's visit to Mexico is well known. A recent writer in the *Gentleman's Magazine* has attempted, with much ingenuity, to identify Quetzatcoatl with the Irish St. Brendan, or Brandon, whom he supposes to have visited Anahuac, preached the Christian religion, and returned to Ireland, promising to come back again some day. St. Brandon is generally supposed to have set sail from Ireland, in search of Hy-Brasail, the Island of the Blest, and never to have been heard of again. The writer in question deems this last voyage to have been an attempt of the Saint to fulfil the promise he made on quitting Mexico. The Conquistadores supposed Quetzatcoatl to have been a Christian missionary, some believing him to have been St. Thomas; others, I believe, St. Bartholomew. Of course the myth has received a solar interpretation—*cela va sans dire*—and certainly this explanation seems probable. It is true that the sun is not in the habit of returning into the east, whence he came, but the solar mythologists—and, indeed, other mythologists, too—would appear to have studied the Procrustes myth with considerable advantage. Besides, we rarely find a myth wholly consistent in all its

\* Livy, book i. † *Odyssey*, iv. 562 et seq.

parts. The case of those who support the historical interpretation is rather weakened by the fact that the Peruvians also have a tradition that certain white-bearded men brought civilization from the East. Now, it is highly improbable that, before the arrival of the Spaniards, any European had ever crossed the American continent, while it may be very plausibly argued that the bright sun-god would naturally be termed a white man. The beard, in each case, may either represent the sun's rays, by a common metaphor, or may simply be an addition posterior to the arrival of the Spaniards, in order to make the story more symmetrical. Such things do occur in barbarous myth, as well as in civilized gossip.

In the more northern part of the American continent, it is said that Glooskap, the chief divinity of the Algonquin tribes of Maine and New Brunswick, was miraculously born "in the land of the Wabanahi, which is next to sunrise." Thence he came to America in a stone canoe (or floating island), and created men and animals, or—and here appears the customary inconsistency of myth—dispelled the physical and mental darkness which prevailed before his arrival. This darkness must have been very dense, for an Indian pathetically relates, "it was so dark that they could not even see to slay their enemies;" a state of things almost as bad as that prevailing in Chaos, when, if we may believe Hans Sachs, it was so dark that the very cats would run up against each other. Glooskap taught men to hunt and fish, to build huts, canoes and weirs, and to make nets and weapons. He also taught them the names of plants and animals, and which were fit for the use of man, and the names of the stars. He rid the country of monsters and cannibals which infested it; he constructed roads and bridges. But men and beasts alike proved ungrateful, and Glooskap, unable longer to endure their increasing wickedness, made a great feast, to which all the animals came. He then got into his canoe, and went away, singing the while; and, when his voice had died quite away, the beasts found that they could no longer understand each other as before, and dispersed, and have never since met in council. And "until the day when Glooskap shall return to restore the golden age, and make men and animals dwell once more together in amity

and peace, all Nature mourns." The Algonquins believe that he sits in a great wigwam, making a vast store of arrows against the day when he shall come forth to destroy all the world. Then will there be a great battle between him and the powers of evil, in which he will conquer; this world will be brought to a violent end, and then come the happy hunting grounds, which will last forever.\* This part of the tradition may have its germ in the Christian account of the last judgment, but, as Mr. Leland correctly points out, the Algonquin fable much more strongly resembles the Norse prophecies of Ragnarök. Mr. Leland, indeed, is inclined to derive the myth from Norse sources. Such an origin is possible, but it is also quite possible that it was independently evolved by the Indian mind. Both the Norse and Algonquin accounts of the end of the world are very similar to that contained in the Avesta.

The Hurons had a similar story concerning the disappearance of their culture-deity, Hiawatha, who corresponds to the Glooskap of the Algonquin mythology.

Returning to Europe, we discern a remarkable similarity between the Glooskap myth, and that of Wainämöinen, the culture-deity of Finland, and hero of the Finnish national epic, "The Kalevala." Wainämöinen, like Glooskap, was born in a miraculous manner, and, upon his landing in Finland, taught men agriculture and the social arts. In the course of a long life, Wainämöinen travelled and fought, made love, and war, and poetry, practised magic, and visited Hades, all after the approved fashion of the barbarous, or semi-barbarous, hero. At length, however, the child Christ was born, of whose birth "The Kalevala" gives the following curious account: The maid Marjatta, "as pure as the dew is, as holy as the stars are, that live without stain," was feeding her flocks, and listening to "the golden cuckoo," when a berry fell into her bosom.† She conceived and bore a child, who, with his mother, was despised and rejected, and thrust into a stable. Wainämöinen foreseeing in his advent the

\* Leland, *Algonquin Legends*.

† The Aztec war-god Huitzilopochtli was conceived of a floating ball of humming-bird's feathers, which his mother placed in her bosom.

downfall of paganism, advised that he should be slain. The child rebuked him, whereupon he built a magic bark, by the spell of his song, and floated out to sea, singing, "Times go by, and suns shall rise and set, and then shall men have need of me, and shall look for the promise of my coming, that I may make a new sam-po,\* and a new harp, and bring back sunlight and moonshine, and the joy that is banished from the world."†

Hitherto we have been dealing with mythical or semi-mythical heroes, or, at any rate, with characters about whose names a considerable accretion of myth has gathered. But even when we come more indisputably within the domain of history, we constantly find that, when the end of an exalted personage has been attended by some mystery, a rumor has been disseminated, and obtained a wide credence, that he is not yet dead, and that his return may yet be looked for.

Thus, the Saxons believed that Harold was not really slain at Hastings, although his body was identified upon the field of battle, but that he had been wounded and secretly carried off by some monks. Some said that he took monastic vows; but a story prevailed that he fought in the English or Anglo-Norman ranks at the battle of Tenchebraye, in a suit of black armor, and, by his prowess, materially contributed to the victory of Henry I. over his brother, Duke Robert.

Like rumors prevailed concerning King Sebastian, of Portugal, who was slain in Africa, in battle with the Moors, and James IV. of Scotland, who fell at Flodden.

The existence of these and the like rumors partly accounts for the ready credence which has always been accorded to pretenders, who assume the name of some dead king or prince. The name of these impostors is legion; but, as the subject hardly comes within the scope of the present paper, it will suffice to instance, in ancient history, the pseudo-Nero, a freedman, whose personal resemblance to Nero, and skill in playing on the harp, convinced many persons that he was that monarch, and attracted a large following until he

was put to death.\* In modern history Lambert Simnel and Perkin Warbeck are familiar examples, the former of whom asserted that he was the young Earl of Warwick, escaped from the Tower, and the latter passed himself off as the Duke of York, who had been murdered in the Tower by Richard III.

The ready acceptance, however, which these impostors have met with may, perhaps, be also partly accounted for by the favor which the multitude is ever ready to show to any one who will promise, regardless of the laws of political economy, that, under his *régime*, there shall be "seven halfpenny loaves sold for a penny," and that "the three-hooped pot shall have ten hoops."

Far into the present century, even, such beliefs have held their ground. Long after Bonaparte had been dead and buried, and his heart, to use Sir Lucius O'Trigger's expression, "pickled, and sent home," the veterans of the *grande armée* continued to believe that their Emperor was still alive, and would return some day to lead on the French eagles again to victory. This superstition gave occasion to a heartless practical joke, with the account of which we will close this, by no means exhaustive, study of a very interesting subject. There was quartered in a provincial town of France a veteran of the Old Guard, who was firmly convinced of the future coming of the Emperor, and would descant upon this topic at a *café* he used to frequent, at such a length as alternately to amuse and bore a party of young men whom he used to meet there, and who would often draw the old man out. One day it became known to them that a certain relative of Napoleon, who bore a striking resemblance to him, would enter the town that night, in command of a detachment of troops. Seeing an opportunity of indulging in a joke at the old man's expense, they told him, as a great secret, that his hopes were about to be realized, and that, if he desired to witness the Emperor's return, he should get himself placed on duty that night at the gate of the town. The veteran did so, and, palpitating with joy and expectancy, awaited the appointed hour. It came, the sound of drums approached, the troops entered the place, and, at their head, rode one,

\* A mill for corn one day, for salt the next, for money the next.

† See A. Lang, "The Kalevala" in *Custom and Myth*.

\* Tacitus, *History*, ii. 8.

whose calm face and clear cut features awakened in the old soldier's mind memories of the glorious past. In an agony of joy he exclaimed, "C'est lui!"—he

dropped his musket, threw up his arms, and with a cry of "Vive l'Empereur!" fell dead.—*Gentleman's Magazine.*

## RABIES.

BY M. LOUIS PASTEUR.

### I.

RABIES is a disease which has been known from the earliest times. The dog may give it to man and to domestic animals. Animals, again, may communicate it to each other. At the time of writing this paper rabies is raging in England in a herd of deer in the park of the Marquis of Bristol, at Ickworth. The herd was composed of five hundred animals, and two hundred of them have already died, while the disease still rages. A rabid dog found his way into the park during the month of April last, and bit several animals, which died of rabies, but only after they had bitten a large number of their companions.\*

A short time ago our knowledge of this disease was still surrounded by many popular fallacies. Old writings, recent papers even, state that rabies may originate spontaneously, and the occasional causes producing the disease are likewise described. In the streets of certain towns one may see along the walls, in the summer time, small tin vessels filled with water in order that dogs may satisfy their thirst. Many think that unless such precautions are taken some animals must become rabid. Nevertheless, it is a fact that, in whatever physiological or pathological conditions a dog or any other animal is placed, rabies never makes its appearance in that animal unless it has been bitten or licked by another suffering from rabies at the time the wound was inflicted. Every person who is of opinion that rabies may originate spontaneously—an opinion I am

even now fighting against—will at once answer: "But there must have been, at some time or other, one first animal spontaneously afflicted with rabies." That answer simply opens up the whole question of the origin of things, a question which is altogether outside the domain of scientific investigation. Whence came the first man? Whence came the first oak tree? Nobody knows, and it is useless to discuss such mysteries. Observation alone shows us that rabies never originates spontaneously. Nobody has ever proved the existence of spontaneous rabies, though many have attributed to it the symptoms of epilepsy, a disease frequently met with in the canine species. Further, it never breaks out in any country unless when introduced there by an animal bitten in another place where rabies is endemic. Many islands in the Pacific Ocean are quite free from it. It is not met with in the wide Australian continent, Norway, or Lapland. And yet these countries will be free of it only so long as they take proper measures to prevent the introduction of dogs which, after being bitten in another country, carry the virus with them in a latent form.

Moreover, it is not difficult to prove that rabies is a disease which cannot appear *de novo* under any physiological conditions, and that its spontaneous origin is quite impossible. We know nowadays that contagious or virulent affections are caused by small microscopic beings which are called microbes. The anthrax of cattle, malignant pustule of man, is produced by a microbe; croup is produced by a microbe. . . . The microbe of rabies has not been isolated as yet, but, judging by analogy, we must believe in its existence. To resume: every virus is a microbe.

Although these beings are of infinite smallness, the conditions of their life and propagation are subject to the same general laws which regulate the birth and

\* This information has been given me by Mr. Adams, demonstrator of pathology at Cambridge University, who is now being inoculated at the Pasteur Institute. This young and very distinguished scientist cut himself with a knife soiled with nervous matter, while performing a post-mortem examination on one of these rabid animals.

multiplication of the higher animal and vegetable beings. They, like the latter, never have a spontaneous origin; like the latter, they are derived from beings similar to themselves. It has been proved, without the shadow of a doubt, that, in the present state of science, the belief in spontaneous generation is a chimera. If it be said that life must have appeared on this earth spontaneously at some period or other, I must repeat the statement which I made just now, namely, that the origin of all things on earth is hidden behind an impenetrable veil. In short, rabies is not a spontaneous disease.

As it is always due to the direct inoculation of its virus by a rabid animal, it is easy to understand that simple police measures will suffice to stamp out this horrible disease, more especially in insular countries like England or Ireland. Two or three years would perhaps be enough to eradicate it, if owners were compelled to muzzle their dogs or to lead them by a string when in the streets. The destruction of all wolves in the United Kingdom was a far more difficult task, and yet it was successfully accomplished.

Everybody, medical men especially, agree in thinking that rabies, in man at least, is an incurable disease. If a man be bitten by a rabid animal in such a manner that he must necessarily die of rabies, his health may nevertheless remain perfectly good for several weeks, though the treacherous virus creeps on in his body, carried by the blood or finding its way along the nerves, until it invades the nervous centres. It is always first found in the latter, and thence passes into the salivary glands. The first symptoms now make their appearance: fear of water and of all liquids, intense headache, spasms of the throat, dilated pupils, haggard eyes, severe pain or mere itching at the seat of the bite. In rare cases the patient tries to bite; if so, he bites the bed clothes, but the people near him only in rare cases. He expectorates frequently, while convulsive movements follow on the slightest breath or draught of air. He is afraid of shining objects, and the slightest noise causes him to start. . . . These are some of the striking signs of the disease. If one or several of these morbid symptoms make their appearance, rabies is present, and, whatever may be done, runs its own independent and fatal course. Death,

sometimes preceded by horrible sufferings and indescribable maniacal attacks of fury, shortly follows.

Strange to say, this disease, on which the resources of medicine have no effect, has been treated in all countries by an endless number of remedies, all supposed to be infallible. There is no country in Europe or America, be it small or large, in which persons are not to be found who are supposed to be able to cure rabies, or in which practices which are said to prevent the occurrence of the disease may not be studied. The erroneous belief on which such practices are based is due to the fact that it is difficult for men in general to apply to their knowledge of facts, more or less mysterious in their nature, and the causation of which is unexplained, the precepts derived from experimental methods. The human mind is always struck by anything which appears to be marvellous. A man, for instance, will often believe the quack who tells him that a stone of a certain kind, or a plant, will prevent the evil effects of a bite from a rabid animal, provided this stone or plant be merely placed in contact with the wound. He may say even that he has personally experienced the good effects of such a practice, if rabies has not followed the application of the remedy to one patient. He forgets that to draw such a conclusion must necessarily be a mistake, simply because every bite from a rabid animal is not always followed by the breaking out of the disease in the person so bitten. Now, suppose a hundred people to have been bitten by rabid dogs, how many will die of this terrible disease? It is difficult to answer such a question. Moreover, the number of victims varies for several reasons. Nevertheless, it is generally supposed that if the deaths taking place among a large number of persons bitten by rabid animals be added up, and if their seat and gravity be not taken into account, the mortality among persons bitten amounts to 15 or 20 per cent. In other words, more than eighty out of a hundred persons suffer no evil effects from the bite. It is easy therefore to be deceived as to the value of any preventive remedy. For, if we apply it to a small number of persons, it will seem to have been successful in four cases out of five. Is that not more than sufficient to warrant a quack, whose advice is taken, to say

that his remedy is infallible, and to cause ignorant men to blindly share his belief?

The experimental method judges facts more severely. That method teaches us that, if we are to believe in the efficacy of a preventive remedy against rabies among persons bitten by rabid animals, it would be necessary, in the first place, to discover a process enabling the experimenter to reproduce rabies in an animal at will. A number of dogs having then been inoculated with rabies, according to that process, would have to be divided into two batches, the remedy being applied to one batch, and the disease being allowed to run its course unopposed in the other, until death followed. It would be easy to compare the course of the disease in the two lots, and the action of the remedy could thus be conclusively demonstrated, provided rabies and death did not follow the introduction of the virus into animals treated by the remedy. We have tested in this way remedies which are supposed to be able to prevent the occurrence of rabies, and are said by their owners to be infallible, but we have never obtained any satisfactory results.

It is not so easy as one might think at first to successfully inoculate a series of animals with rabies. We have formerly called attention to the fact that, if dogs be bitten by rabid animals, the disease does not appear in all of them. A direct subcutaneous inoculation of the saliva of a rabid dog is hardly more successful. The saliva contains, together with the microbe of hydrophobia, other microbes of various kinds which may give rise to abscesses and other morbid complications and thus prevent the occurrence of rabies. In short, only a few years ago, experimenters would not have known where to find the virus in a pure state, nor how to use it in such a way as to produce rabies and nothing but rabies. Luckily, these two difficulties were overcome at the same time by the following discovery. If the autopsy of an animal dead of rabies be made, and if a small portion of the brain, spinal cord, or, better perhaps, of the thicker part of the cord which unites this to the brain—a part which is called *medulla oblongata* or *bulbus*—be taken, and if this portion of the central nervous system be crushed in a sterilized fluid, with all necessary antiseptic precautions, and if a small quantity of this fluid be now introduced on the sur-

face of the brain of a chloroformed animal (dog, rabbit, or guinea pig) by means of a hypodermic needle, after trephining, the animal thus inoculated will contract rabies to a certainty, and that in a relatively short time; that is, in a period not exceeding fifteen days or three weeks.

Do you wish, then, to test any remedy which is said to prevent the occurrence of rabies? Take two dogs and inoculate both of them with the virus in the manner which has just been described. Now give that remedy to one of the dogs before or after the operation, as many times as you like, and leave the other dog to take its chance. You will then notice that rabies makes its appearance as readily in the first as in the second animal. Of course we have not tested in this way *all* the numerous remedies praised by quacks, but we have tried some which are said to have proved most successful, without meeting with the least success.

Very different results are obtained if the method which I explained before the Académie des Sciences de Paris, on October 16th, 1885, be used. That method of vaccination resembles in many of its general characteristics the methods of prophylaxis against contagious diseases which are based on the inoculation of attenuated virus. The injection of such attenuated virus vaccinates animals, and thus enables them to resist the attack of the corresponding strong virus.

Every virus, or rather all virulent and infectious microbes, may be attenuated by natural or artificial means. The virus of small-pox in man is represented in an attenuated condition by the cow-pox virus of bovine animals. The latter has been produced—at least so I am inclined to think—by accident,<sup>1</sup> and successive inoculations of human small-pox virus on the udders of cows, and its present state of virulence has at last become “fixed” there. In the same way the virus of rabies is greatly modified by successive inoculations on monkeys or rabbits.

Similarly, again, the fatal virus of anthrax is modified by the action of air and heat until at last it is rendered harmless. It passes through intermediate stages, however, in which it may still prove fatal to animals of small size but harmless when inoculated into domestic animals, although it vaccinates the latter against the attacks of the primitive fatal virus. In the same

way the virus of rabies may be attenuated to any desirable degree by the action of air and moderate heat, and may then, when inoculated into animals, enable them to resist the action of the primitive fatal virus. In other words, one may produce in a dog a state in which it is impossible for that animal to contract rabies. Take a dozen dogs, vaccinate them in the manner which I have just mentioned, and then inoculate them at the surface of the brain with the pure virus of rabies. Then perform the latter operation, at the same time, on twelve other non-vaccinated animals. Not one of the first dozen will contract the disease, but the twelve other animals will all die of it after exhibiting all the various symptoms typical of rabies, resembling in every particular those produced by the bite of a rabid animal wandering about the streets. The experiments which I have just mentioned, showing that dogs may be vaccinated against rabies, may be successfully repeated on other dogs even if they have been bitten by rabid animals before the inoculations are begun, provided too long a period has not elapsed between the time of the bite and that of the protective inoculations. The success of such a course of treatment depends on the usually long period of time intervening between the day of the bite and the period at which the first symptoms of rabies show themselves. The immunity due to vaccination is produced in animals before the period at which the acute symptoms of rabies ought to appear. This is indirectly but fully proved by the fact that, if the period of incubation in a dog be much shortened, our method may not prove successful in vaccinating that animal. If the virus be, for instance, inoculated at the surface of the brain, the disease often follows as early as two weeks after the inoculation. It is noticeable that, in order to protect an animal efficiently under these conditions, the whole process of preventive inoculations must be carried on as quickly as possible, if that animal is to be efficiently vaccinated before the fatal symptoms of rabies appear.

It is necessary to demonstrate by experiments that an animal may acquire immunity against rabies if it be submitted to the prophylactic treatment of which we have spoken here. Of course, all experiments demonstrating this fact must be made on animals only, and all trials on

men must not only be forbidden but, moreover, must be considered as criminal. Nevertheless, we are justified in thinking that results obtained on animals may, for the most part at least, be obtained in man also. Now it is easy to prove that a dog previously vaccinated and so rendered incapable of contracting rabies may be inoculated under the skin with almost any quantity of the purest and strongest virus, without this inoculation being followed by any evil consequences. Vaccinated dogs have been inoculated on different occasions with several cubic centimètres of virus taken from the *medulla oblongata* of dogs dead of rabies, without noticeable evil effects, although such inoculations were effected not only once but every day during several months. Vaccinated dogs during the year succeeding this operation are not injuriously affected by the bites of rabid animals.

Some years ago I brought together at Villeneuve l'Étang many dogs vaccinated during the year 1884, and placed them in a large kennel. After having demonstrated the fact that in 1885 and 1886 the larger number of these animals, though not all (eleven out of fourteen in 1885, four out of six in 1886), had not suffered any harm from the inoculation of the *rage des rues* (street rabies) even when the virus was deposited on the surface of the brain, I came to the conclusion that, after all, it was only necessary to know whether such vaccinated animals would be able to resist the action of the virus when introduced by a bite. Accordingly, in 1887, 1888, and 1889, vaccinated animals were merely bitten by dogs suffering from rabies, and not inoculated under the skull. In 1887, the vaccinated dogs suffered no evil effects after being inoculated by the bite of a rabid dog. In the month of July, 1888, five dogs vaccinated in the year 1884 were bitten, together with five non-vaccinated animals. The five vaccinated animals are now (August, 1889) still in perfect health, whereas, of the five others, three died of rabies and two are living now. At the time of writing a similar experiment is in progress on another group of animals vaccinated in 1884. If these animals resist, and if all or some of the non-vaccinated animals die of rabies, it will be a positive proof that the artificial immunity against fresh bites from rabid animals may extend over a period exceed-

ing five years. However great the advances made in our knowledge of the etiology and prophylaxis of rabies among animals may have been, these results were interesting, chiefly because they justified us more and more in hoping that the preventive methods against rabies might be successful in the case of men bitten by rabid animals. But the question was how

to summon up courage enough to make that trial and to overstep the frontier which separates man from animals. If it be true that the Goddess of Chance helps men who are determined to find out the truth, we are certainly justified in thinking that she did so under the circumstances which I am about to relate.—*New Review*.  
(To be concluded.)

#### SCEPTICISM ABOUT ONE'S SELF.

It has been said by devotees of Shakespeare that everything can be found in his plays; and certainly the best description of the newest intellectual foible of mankind is to be found there. The "native hue of resolution" was never so "sicklied o'er with the pale cast of thought" as it is nowadays, when scepticism attacks other things than belief in theology. Not only have men begun to doubt the creeds, and the accepted moralities, and, in a certain number of cases, the existence of a sentient Creator; not only do they call on all institutions to give a valid reason for their existence,—but they are inclined to doubt their own right to be or to act, to question whether they are not themselves mistakes, and to argue that it would be either morally or intellectually wrong to resist those who intend to sweep them away. They have, to use popular language, no "confidence in their own position," not on account of any want in the position itself, but of an inner scepticism either as to their capacity to fill it, or more generally—self-conceit showing no sign of approaching death—of the rightfulness or utility of the position itself. The feeling was exactly expressed by a retired Anglo-Indian of eminence in 1861. He had governed a province unusually well, and done a quantity of great work which needed doing, but he congratulated himself heartily that he had retired before the Mutiny. "I could never have fought hard," he said, "for I could never make up my mind whether our conquest of India was a divinely inspired act or a great dacoity." He had gone on governing, but did not know if he had a right to govern, and in the great emergency he thought he would have failed. As a matter of fact, he would probably have fought very well, the fighting temper being roused;

but he thought otherwise. The feeling spreads, however, to all classes, except, indeed, poets—at least, we never heard of a poet who disbelieved either in poetry or himself as a poetry-producer—even to business men, who are occasionally harassed to a degree their most intimate friends do not know as to the lawfulness or the utility of their particular trades. "I doubt about banking very much," said a prosperous banker, leaning over the gate into a cornfield; "where does my right to profit above the interest of my capital spring from?—but farming must be good, for it begets food." "And yet," he added immediately, "I am not quite sure. Every field of corn I grew would help to overfill the market, and so lower laborers' wages." Judges grow greatly troubled when sentences must be heavy, asking themselves if crime may not, after all, be lunacy; and lawyers, when they happen to think that every man should seek to promote pure justice instead of his client's case. We have known soldiers who doubted whether war was not wicked; and editors who held that, on the whole, a free Press was more of a nuisance than a blessing; while the number of doubtful clergymen—doubtful of the use of clericality, we mean, not of doctrines—is almost legion. The doubt is, however, most keen in aristocrats and Kings. A certain proportion of the English Peerage doubt their own right to be, and would vote against the House of Lords; while the number of Kings who question the sanctity of Kingship increases every day. Louis Philippe could not, they say, bring himself to fire upon the mob of '48, because to his own inner mind he was a usurper, and in his thought he held constitutional kingship to be an absurd farce. A legitimate King had great rights, and

so had an elected President, but what was a constitutional King? King Amadeo evidently thought the same when he abdicated in Madrid because the aristocracy insulted his wife; and it is believed to have been a dominant idea with the ex-Emperor Pedro of Brazil. In the strange drama enacted on Friday week at Petropolis, many motives must have mingled, but among them, one of the strongest must have been his often-expressed thought,—“Why should I be a Sovereign if the people wish to govern themselves?” “My natural business,” he once said, “is to be a Professor.” So he struck no blow, but went away quietly, leaving his native country and his throne as a man might leave an estate to which he doubted his full right. It must have been a strange scene that, altogether: the soldier threatening, the heirs bargaining, and the old King, feeblest of philosophers, speculating whether if he could resist he would,—because after all, you know, Kings have no right to be unless they are desired.

It is usual, we think, in our day to regard this condition of mind as rather a fine one. Such doubts, it is said, show an open mind, capable of sympathizing even with opposition. If that is so, it is a rare instance of correct thought producing weakness, for we may be sure that no man thus sceptical of himself and the rightfulness of his own position will ever do his whole duty, especially that part of it, self-defence, which is often so essential; but we question whether the condition is admirable at all. There is, we fancy, quite as much weakness as virtue in it, or intellectual penness either. One likes a sentry to go on pacing, and not to be so ready to argue with the first comer whether sentries can be part of the divinely appointed scheme. An incapacity of fully believing is not a strength, but only a sign of a mind which may in rare cases be strong, but is more often flabby and undecided. A man may think his position or occupation wrong, and then he is bound to leave it; but if he does not think so, he should quell his doubts, and do the duty he was set by Providence or his own history to do. We should never blame an officer for throwing up his commission rather than command in a war he believed to be utterly unjust; but if he does not believe that, and only doubts that in commanding in a war he is somehow out of

place, and intellectually a little ridiculous, we should say his duty was to do the work before him as well as he knew how. The case is much stronger with a Sovereign. A man may refuse to be a King, and be blameless; but if he is a King, he has, from the very nature of the function, accepted a perpetual contract, and should defend his throne. If his people are in earnest, they will turn him out, and the very object of his being is to prevent their changing the essential order of the State on insufficient grounds, or in too light-hearted a way. A bloodless revolution, unless, indeed, also a legal revolution, is a revolution which ought never to have occurred. All that horror of shedding blood in defence of a throne is unreasonable. If it is right to defend a people against their enemies, it is right to defend them against their aberrations; and the King is bound to consider treason an aberration. It seems to us that on any other theory the whole notion of trusteeship vanishes, and no man can utilize rightly any power that has been put into his hands by inheritance or otherwise. A millionaire may fancy others could utilize his wealth better than himself; but still, it has been given to him, and his business is to use it as well as he can, not to give it away, and so transfer his responsibility to others. That is shirking, and if we cared to describe most cases of abdication we should do it in that single and contumelious word. Let the King stick there and die there, as any officer would if his men were in mutiny, not go away because perchance the mutiny laws are severe, and the men are misguided, and possibly somebody may be shot. There will be, or may be, thousands shot in Brazil because the Emperor failed to shoot a few soldiers, as there were thousands shot in Paris by Cavaignac because Louis Philippe would not order the cannon to fire. Half the scepticism about functions is nothing but distaste for a duty which has become disagreeable, but which nevertheless ought to be done. The man's hand has grown too weak for the wheel, and therefore the ship is to be left rudderless. He can cling on and die clinging, but that is exactly what he will not do; and in that absence of the power of self-sacrifice is the condemnation of the thought, partly born of self-distrust, partly of distrust of any higher power, which has paralyzed his energy.

We suppose it is thought which produces these hesitations of our day. Shakespeare thought so, and he knew human nature as we cannot pretend to do; but it sometimes occurs to us that it may not be thought at all. There may be forms of moral cowardice as independent of thought as physical cowardice is sometimes of the will, and almost as much exempt from responsibility. Men admire strength, and have studied it, and know even how to generate it; but they have been neither so patient nor so observant about weakness. We suspect that there are a good many men like the poet Cowper, who literally could not face his position as Clerk to the House of Lords, and, long before his mind had given way, threw it up in a fit of self-distrusting horror. That was not a result of thought at all, but, if he was sane, of a weakness exactly corresponding in the mind to cowardice in the physical nature. It is a quality to be lamented over, and sometimes pitied; but it is never praiseworthy. Indeed, it

never is praised, except by those who like its results, and who, desiring change, see that under the operation of this dread of responsibility, this uncertainty as to duty, this doubt whether anything but renunciation can ever be right, no stable thing can exist. The man who does not believe in his own functions, be they King's or beadle's, is certain to be partially useless, and though he may be sometimes an enlightened man unable not to see the ridiculous aspect of his crown or his red coat, he may be also, and usually is, much of a moral coward. Nine times out of ten, the work you have to do is work you ought not to shirk, and to leave that work undone because of faint inner hesitations, especially if you never act on them when all is smooth, is nothing but shirking, which would be discreditable, but that the whole world is doubtful whether any man has a right to anything, even to the position in which Providence has obviously placed him.—*Spectator*.

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AN ANNIVERSARY: DECEMBER 10, 1688.

BY JEAN INGELOW.

*Two Gentlemen Meet near Whitehall.*

*First.* Give you good-day.

*Second.* Sir, it is so far good,  
The day, that men have quiet. Wait awhile,  
There is a wise old saw which counselleth;  
"Praise the good day at e'en."

*First.* I see not why  
More than these many days to look for stir.

*Second.* Except it may be this, by nine o' the clock  
We two are forth, and lingering on our road,  
Do look toward the windows of Whitehall,  
A like attention is in other eyes.  
What would we, can you tell?

*First.* What I would, ay,  
To gather up wild rumors nigh their source  
Concerning of the king. But I'll speak low,  
And in especial having speech with you,  
And of such king, he being—what he is.  
There's something treacherous in their memory,  
The whole race bath it. Troth 'twas ever good;  
In what concerns remembering of a foe,  
And equal good as many have found cause  
To know, for the forgetting of a friend.

*Second.* And the forgetting of a plighted word,  
Speak low indeed! But I do think their span  
They have nearly measured out. 'Twas yesterday,

He called his second council ; of all such  
O' the Upper House as would attend on it.

*First.* Your father would be there.

*Second.*

Ay, he was there,

With others.

*First.* But what for ?

*Second.*

Why, know you not ?

If future blame should be to throw it on them,  
To ask advice, to have their countenance ;  
To beg for arms, for men, for money, sir,  
For anything ; he hath no heart this king.  
But none would have believed *this* even of him,  
Unless they had heard it. Ere the conference  
Broke up, my Lord of Bedford sitting nigh,  
To him the king turns, thinking not a whit  
Of aught—distraught and pale—but his own need.  
“ My lord, you are a good man,” quoth the king,  
“ You have great influence ; you might help me much  
Now, in this exigency of affairs.”  
Then all did hold their breath and stare at him.  
The duke kept silence for a little space,  
And then he sighed. When he did speak, “ I am old,  
I cannot help your majesty,” quoth he,  
“ I had indeed a son.” The king on this  
Was so struck dumb he could not speak nor move.  
Nor lift his eyes. Those were the tellingest words  
Ever man said. Albeit his heart be cold  
And hard ; fenced as with adamant walls  
Such arrows were of force to pierce them through.  
He felt them.

*First.* Ah ! his soul did chide with him ;  
He heard within, concerning that same vote,  
Fatal, yet righteous on the Exclusion Bill,  
What men say far and wide without. It was  
Revenge for that, brought Russell to the block  
(They are not of a treasonable house),  
He suffered not for treason. No.

*Second.*

I hold,

However, with the council that their first  
Need, duty, and necessity, before  
Kings, is for this poor country, this great town.  
After dispersion did they so agree.  
Peace, peace, no rising ; if it be possible  
A quiet tiding over of the times ;  
This makes it dutiful to England, best  
Whatever else they mean, they should have met,  
And I would tell you something more.

*First.*

What more ?

*Second.* The queen is gone.

[A good many youths and boys moving restlessly about. Then they pass on a few steps to an oyster-stall, where are several groups of women, all looking toward Whitehall and talking together.]

You, neighbor, out !

Ay, and I scarce know why.

But we know, gossip, we know very well.  
The streets are wet yet. How it rained last night,

And rained and rained ! Our church right opposite  
Was lighted, one might think the very ghosts  
Risen from the bulging churchyard had been glad  
To go inside for shelter.

Nay, that church,  
Talk not on it to us. The blessed saints,  
The images and relics of the saints,  
Are mean there, ragged.

"Tis not oft so now.  
They want a Saint-smith for to tinker them.

What ! you unreverent maid.

The Fathers there  
Are kind though, many aged have their dole.

Forsooth, they have, poor creatures, there are few  
To care for such, and many a one of them  
As I've heard say dies of old age, alas !  
And that's a shocking scandal. Ay, a shame,  
And should be looked to.

[A ballad-singer draws near, selling broadsheets.

Sirs, and my masters, lo, the hue and cry  
After the Father Petre.

First Gentleman. You were best  
No more to name that priest, sell simpler wares.

Singer. Nay, cry you mercy, sir, I do but earn  
My bread ; look how the 'prentice lads come on.

[Several broadsheets are sold.

Second (whispering). Ay, look ! and yet we tell you it were best  
To hide them. We shall make it best. See, here.

[They both give her money.

Now sing some ditty of the olden time  
And naught with danger in't, you understand,  
To rouse and anger any that attend.

Singer. Forsooth, I thank your honors heartily,  
And shall. Who'll buy ! Who'll buy ! here's goodly gear,  
The lamentable ballad of "Cold Comfort,"  
All on a broadsheet printed plain. The knight,  
And how they parted, he an' 's lawful wife,  
A gentlewoman that did love him dear.

THE LAMENTABLE OLD BALLAD OF "COLD COMFORT."

(Sings.)

"And what is your word, mine own good lord,  
Such drerihedd sore ye dree !"

"O, cold comfort, and cold comfort,  
My deare, and my ladie,

I have slain in fight a comely knight,  
I maun rue it, ayont the sea,

O cold comfort an' cold comfort,  
For the wrong was mine, perdie."

*Cry, cry, hope goeth by, and the last kind word's said ;  
There's no light in his eyes to-night ; would I had died instead.*

“ 'Twas my one brother. He loved none other,  
Men said and swore it, but thee.”  
“ O cold comfort and cold comfort,  
That ever this thing should be.”  
“ Right weariful day, right sinful fray,  
All unassoiled lyeth he.”  
“ O cold comfort, ay, cold comfort,  
Ye never had wrong from me.”

*Fall, fall, faded leaves all, that were in springtide sweet,  
Yea, even so with you, lying low, trodden is joy of the feet.*

“ Some did me flout, and the sword flew out,  
Stark stares he up from the lea,”  
“ O cold comfort and cold comfort  
So truly I loved but thee,  
I ever amain, will, for ye twain,  
Cry on heaven's clemencie.  
O cold comfort and cold comfort  
Full bitter thy weird shall be.”

*There's fear, fear in the high chambere, no more love nor peace,  
No more light on the hearth to-night, nor till the last release.*

“ A hunted man on the welter wan,  
Thy penance thou canst not flee,  
O cold comfort and cold comfort  
Y-witless of remedie.”  
“ But alone faire wife, alone faire wife,  
Maun I sail the wild white sea ?”  
“ Ay, cold comfort and cold comfort  
This last look 'twixt thee and me.”

*Heart, heart, break, for thy part, nought such woe may mend,  
There's no sun, the sweet day's done ; break and so an end.*

*[As the singer moves on and the people follow they talk again.]*

*First.* Now one may speak, and not to other ears,  
The Queen, sir ?

*Second.* Ay, sir, she is gone indeed.

*First.* It took away my breath to hear the words.  
When was it, and how was it ?

*Second.* Sir, 'twas thus,  
After the council other counsellors

(Not Father Petre, he, retired to France,  
Of this was blameless. Others of his kind,)  
Wrought with the King and Queen but most with him ;  
She being made of stouter stuff—in brief  
She gave consent upon his plighted word,  
That he would follow her, to take the boy  
And that same night to fly. It was a night,  
Oh such a night ! when the poor lady stole  
Disguised to the river edge.

*First.* She had the prince.

*Second.* Ay.

*First.* That looks well, looks like a mother, Sir.

*Second.* I thought so. They took water at Whitehall,  
She only, with the nurse that carried him  
And an old lord whom Lewis oversea  
Had sent to attend her. Buffeted of wind  
And rain they crossed, but the small unweaned heir  
Made no ado. It was all one to him  
That move might cost him England, and he slept.  
If he return no more there is the king,  
His father, and none else to blame.

[*The ballad-singer, moving nearer, sings again.*]

Oh how alas what ails to tell,  
For all that is doth ail;  
Most fairest fair, 'tis I to-night  
The narrow seas must sail.

To-night when buds on hawthorn boughs  
Unfold and scent the lea,  
But they shall flower and fall and fruit  
Ere I come home to thee.

But think you thus, I must be true  
How lone soe'er my lot,  
For what were left was worth a thought,  
If, love, I you forget.

And dost thou whisper, "Fancy fleets,  
And vows do nought avail;  
For some are known their troth to break  
And some are found to fail?"

Most fairest fair, we love, we part,  
And oft is change below.  
But I forget and you remember!  
No! forever no.

If I forget and you forget,  
Thereby no wrong shall be.  
If you forget and I remember,  
Oh! the worse for me.

What ails alas, what ails I tell,  
And all that is doth ail.  
O ill-starred wight, 'tis I to-night  
The narrow seas must sail.

*First.* The narrow seas, alway the narrow seas.

*Second.* Nay, sir, that makes for nothing,

She knows nought,

But when some mastering movement is afield  
All things appear to play about it, hint,  
Suggest, betray. The loud clock strikes to tell.  
I say the narrow seas are in the air,  
The fate of England floats on them. The pulse  
Of England, therefore, rises with them, turns,  
Goes down unconsciously upon their tides.

[A number of women and lads come running back with cries of "The Queen! The Queen!"]

*Second (stepping forward).* What of the Queen, good people?

*A Woman.*

Sir, they say

The queen is gone.

*Second.*

Poor lady, say they so!

Gone! Well, if this be, I am bold to ask,  
And what could she do better? If you know,  
Speak. If the greatest lady of the land  
Is wanted here by any of you, speak.

*Woman.* Though it be good, sir, sure 'tis parlous news.

*First.* Ay, parlous; yet how quiet are the streets,  
How empty; should be if we had our way,  
You comely mothers and fresh daughters here,  
By absence of you all more empty still;  
There is no let, but each may now go home  
And sit by her own fire.

*A Woman.*

Is aught to fear?

*Another.* Neighbors, the Queen is gone. The gentlemen  
Deny it not. Therefore, is much to fear  
When the news, spreading, brings a crowd toward,  
Soldiers and maybe fighting. Hark ye, maids,  
Where are my two? I'm for home, neighbors, home.

[*Exeunt omnes.*]

—Longman's Magazine.

#### THE PESSIMIST VIEW OF WORK.

THE extraordinary pessimism of the French about all that relates to labor has been a subject of remark for the last thirty years. They appear unable to conceive of toil as of anything but a crushing and even degrading burden, beneath which men may, indeed, display patience or submission, but can never feel joy, or, except in the case of the rarest temperaments, which are despised for their possession of the quality, even careless content. In French literature, the workman is always oppressed, always in want, always a slave to a destiny which is never less than passively hostile. The artisan suffers, the peasant endures, and both are sad or gloomy or sordid, not from any volition of their own, but under the pressure of an inexorable fate. Not only does the idealist describe the worker as a kind of God-forgotten victim, and the realist depict him as a sort of beast too nearly animal to be responsible for his vileness, but the painter, even when he is, like Millet, a man of religious fervor, shows him always bending beneath the weight of care, or, as in "The Sower," incurably saddened by the work with which, in spite of the birds which follow his footsteps

and eat up half his seed, he steadfastly perseveres. How deeply rooted this view of labor has become, appears in a little story told in the *St. James' Gazette* of Monday last. The French Academy gives a prize of four thousand francs every year for the best copy of verses for which it suggests the subject. This year it was "Labor;" and of all the two hundred and more poets who struggled for the prize, not one had treated the subject from any other point of view than that of pessimism. All dwelt on the painful toilsomeness of manual work, and not one on the satisfaction it produces, or even, it would seem, on the healthfulness of body and the sweet sleep it necessarily yields. Labor is, in fact, to the writers, an object either of abhorrence or of the kind of pity stirred by physical misfortune. We think we notice a rapid spread of the same feeling in England, not, indeed, among the poets, but among writers of fiction, like Mr. Besant, who always paints the lot of East-Enders as if they never could enjoy anything; and among the journalists, who reserve all their softest sentiments for those whose hard and unjust lot has compelled them to work all day, and who ap-

parently regard the compulsion of necessity as almost as much deserving of resistance as the compulsion of the lash. The workman is often with them a kind of convict, with the foreman for warder, the "shop" for prison, and the daily task to be finished for the sentence to hard labor.

We wonder greatly whither this revolt against industry will lead, and whether it has any foundation in the realities of modern life. But for certain circumstances, we should half suspect that it had not, and should decide that the abhorrence of work was not the feeling of the workers, but only a feeling which *littérateurs* think that they themselves would feel if they had manual labor to perform. We do not find that the educated, when really overworked, as, for instance, rising professionals often are overworked till Nature revenges herself by striking, usually detest the work. They often dislike its hurry, or the seclusion it enforces, or its consequences upon health; but they do not dislike the work itself, and until they grow middle-aged, remain impatient of advice to diminish it at the sacrifice of any portion of its profits. They work on, and so do the poor when they are working for themselves. The small shopkeepers, the masterless artisans, and those agricultural laborers who possess allotments, often work like Chinese, thinking nothing of fifteen hours a day, and if their gains are at all proportionate, are still fairly content. Nor do we notice this bitterness among workers for wages, if only the wages are enough. They wish for shorter hours, as almost all of us do, and if the hours exceed sixty in the week, the wish grows passionately strong; but their most genuine feeling is drawn out rather by the amount of their pay than by the hours spent in earning it. Few among them would accede to the abolition of overtime without an increase of wages; and fewer still would, were the choice a free one, accept short hours at the price of the sacrifice of all luxuries in the way of liquor and tobacco. We should say, if we argued from what appears on the surface alone, that the literary feeling on the subject, however general, was rather the mood, possibly the passing mood, of an over-sensitive class than the result of a general distaste for toil,—was, in fact, only one phase of that passion for the indulgence of pity which in a hundred directions marks this

generation, and if it softens and "humanizes," does not altogether tend to strengthen it. The *littérateurs* of a generation always catch and exaggerate its note; and as the note of this generation is sympathy, they extend their sympathy to the laborer, and read into his lot an amount of suffering of which he is himself, partly at least, unconscious. After all, the workman has, as regards a portion at least of his destiny, the advantage of the rich man,—he sleeps better, and sleep is a third of life; he has better health, and health is the first of satisfactions; he enjoys his food more, and the pacification of hunger is the most recurrent of the pleasures; and he has, as we believe, more of the enjoyment alike of society and of friendship, the latter a pleasure which the cultivated of our day have in large measure thrown away. It is not, however, possible to be blind to the fact that on the Continent, and in some of our great cities, the laborers think of their labor as those who pity them do; that there is a bitterness as of men oppressed among them; that work is regarded as a heavy burden, if not as a positive curse; and that the envy of leisure is keener, especially among the weaker sort, than the envy of wealth. It is difficult to doubt that the artisans of cities at least bemoan their lot far more than they did, and that in capitals like Paris, Berlin, and Vienna, the growth of a savage kind of Socialism is the outcome of a growing discontent with toil as the permanent condition of existence. The workmen are not yet articulate enough to draw their own Utopias; but if they could, we fancy that, with a portion of them at least, hard work would be only a rare incident in their daily lot.

The evil, so far as it is an evil—and we think it a great one—is due, of course, partly to the startling increase of self-consciousness which may be noticed in all men and in all departments of life; partly to the growth of the passion for comfort which distinguishes Europe and our own day; and partly to that impatience of the monotony inseparable from severe labor which is helping to produce, for one symptom, the emigration of rural folk into the great cities. Labor, as it is now subdivided, is dull, and therefore is sometimes detested as a bondage which men only endure because the pain of hunger is sharper than the pain of weariness. Our business

to-day, however, is rather with the result which the new feeling, supposing it to spread until it became as general among European workmen as it is among French poets, would probably produce. We can see, we confess, no result for good, and, indeed, no result at all, except a vast increase of that pessimist melancholy which everywhere begins to reduce what there is of gladness in the world. The necessity of work will not cease. The body of workers, whenever they please, and are convinced enough to break up the armies by refusing them supplies, can, of course, distribute among themselves so much of the world's wealth as is not dependent upon credit or upon the exercise of brain-power, as they have on the Continent and throughout Asia gradually distributed the soil. They can do no more if they all die fighting, for equality and artificial credit cannot co-exist, nor will the man who can guide accept the wages of the man guided; but they can do this, and when they have done it, all the work will still remain to be done. Houses must be built and repaired; cities must be paved and drained; fuel must be excavated with painful toil; metals must be dug out of the mines; the beasts must be tended and controlled; and, above all, the fields must be tilled in all climates and under all weathers, and the crops must be got in with a rapid and exhausting effort of one kind or another. The pleasure of leisure now enjoyed by perhaps one per cent. of mankind, may be made a penal offence, and the exhaustion of the overworked may be reduced—though none work so strenuously as the owners of their own fields, and Socialism means, or should mean, ownership for all—but the immense majority of the world, if they are to be as comfortable as the

dreamy author of "Looking Backward," for instance, would have them, must still toil, and, as we believe, remembering the poverty of intensely industrious peoples like the Prussians and the Chinese, must still toil hard, and must, if there is any reason in the nature of things for the new feeling, still detest their labor. Men cannot be more industrious than the Chinese, or, for the most part, more equal; yet their ceaseless industry, guided by rare skill, and expended upon one of the most fertile of countries, barely suffices, if it can be said to suffice, to keep famine from their doors. Toil will not be the sweeter because all pay will be thrown into a common fund, or because the only employer, the community, can neither be evaded, nor defied, nor told with safety, as some great employers are now being told about twice a week, that it is "a beastly oppressor batten on bones and sweat." There is no chance of the world's release from toil, for God or Destiny, whichever it is, has settled that; and if toil is in itself a burden—a proposition we are not discussing, though discussing we should deny it—it is a burden the apparent weight of which must increase with every increase in cultivation and self-consciousness, for we do not suppose that even French poets will declare that the stupider the workman, the more he suffers. With the burden, therefore, pain must increase until man is loaded down by the sense of a necessary duty which he abhors, but of which he can never hope to be rid. We are not optimists, having a conviction that the ultimate use of man is other than his own happiness; but we look forward to a happier destiny for the human race than that.—*Spectator*.

#### ANCIENT ARABIA.

BY PROFESSOR A. H. SAYCE.

If there is any country which has seemed to lie completely outside the stream of ancient history, it is Arabia. In spite of its vast extent, in spite, too, of its position in the very centre of the civilized empires of the ancient East, midway between Egypt and Babylon, Palestine and India, its history has seemed almost a blank.

For a brief moment, indeed, it played a conspicuous part in human affairs, inspiring the *Qoran* of Mohammed, and forging the swords of his followers; then the veil was drawn over it again, which had previously covered it for untold centuries. We think of Arabia only as a country of dreary deserts and uncultured nomads, whose

momentary influence on the history of the world was a strange and exceptional phenomenon.

But the restless spirit of modern research is beginning to discover that such a conception is wide of the truth. The advent of Mohammed had long been prepared for; Arabia had long had a history, though the records of it were lost or forgotten. The explorer and decipherer have been at work during the last few years, and the results they have obtained, fragmentary though they still may be, are yet sufficiently surprising. Not only has Arabia taken its place among the historical nations of antiquity, its monuments turn out to be among the earliest relics of alphabetic writing which we possess.

Arab legend told of the mysterious races of 'Ad and Thamud, who, in the plenitude of their pride and power, refused to listen to the warnings of the prophets of God, and were overwhelmed by divine vengeance. In the south the magnificent palaces of 'Ad might still be seen in vision by the belated traveller, while the rock-cut dwellings of Thamud were pointed out among the cliffs of the north; but the first authentic information about the interior of Arabia came to Europe from the ill-fated expedition of *Ælius Gallus*, the Roman Governor of Egypt, in *A.D.* 24. The spice-bearing regions of Southern Arabia had long carried on an active trade with East and West, and the wealth their commerce had poured into them for centuries had made them the seats of powerful kingdoms. Their ports commanded the trade with India and the further East; already in the tenth chapter of *Genesis* we learn that *Ophir*, the emporium of the products of India, was a brother of *Hazarmaveth* or *Hadramaut*. Western merchants carried back exaggerated reports of the riches of "Araby the Blest," and *Augustus* coveted the possession of a country which commanded the trade with India as well as being itself a land of gold and spicery. Accordingly, with the help of the *Nabatheans* of *Petra*, a Roman army was landed on the western coast of Arabia and marched inland as far as the kingdom of *Sheba* or the *Sabæans*. But disease decimated the invaders, their guides proved treacherous and *Ælius Gallus* had to retreat under a burning sun and through a waterless land. The wrecks of his army found their way with difficulty to Egypt, and the disaster

made such an impression at Rome that the conquest of Arabia was abandoned forever. From that time forward to the rise of Mohammedanism the Roman and Byzantine Courts contented themselves with supporting the native enemies of the Sabæan kings, or using Christianity as a means for weakening their power.

As far back as 1810 *Seetzen*, while travelling in Southern Arabia, discovered and copied certain inscriptions written in characters previously unknown. Later travellers brought to light other inscriptions of the same kind, and eventually, with the help of an Arabic MS., the inscriptions were deciphered, first by *Gesenius*, and then by *Roodiger* (1841). They received the name of *Himyaritic* from that of the district in which they were found—*Himyar*, the country of the *Homerites* of classical geography. The language disclosed by them was Semitic, while their alphabet was closely related to the so-called *Ethiopic* or *Geez*. In certain dialects still spoken on the Southern Arabian coast, notably that of *Mahrah*, between *Hadramaut* and *Oman*, the peculiarities of the old *Himyaritic* language are still to be detected.

In 1841 *Arnaud* succeeded, for the first time, in penetrating inland to the ancient seat of the Sabæans, and in bringing back with him a large spoil of important inscriptions. Later, in 1869, another adventurous journey was made by *M. Halévy*, on behalf of the French Academy, who was rewarded by the discovery of more than 800 texts. But it is to *Dr. Glaser* that we owe the better part of our present knowledge of the geography and ancient history of Southern Arabia. Three times at the risk of his life he has explored a country of which our modern geographers still know so little, and almost alone among Europeans has stood among the ruins of *Mârib*, or *Mariaba*, called by *Strabo* the Metropolis of the Sabæans. He has collected no less than 1031 inscriptions, many of them of the highest historical interest. The first-fruits of his discoveries have been published in his "*Skizze der Geschichte Arabiens*," of which the first part has just appeared at Munich.

For some time past it has been known that the *Himyaritic* inscriptions fall into two groups, distinguished from one another by phonological and grammatical

differences. One of the dialects is philologically older than the other, containing fuller and more primitive grammatical forms. The inscriptions in this dialect belong to a kingdom the capital of which was at Ma'in, and which represents the country of the Minæans of the ancients. The inscriptions in the other dialect were engraved by the princes and people of Sabā, the Sheba of the Old Testament, the Sabæans of classical geography. The Sabæan kingdom lasted to the time of Mohammed, when it was destroyed by the advancing forces of Islam. Its rulers for several generations had been converts to Judaism, and had been engaged in almost constant warfare with the Ethiopic kingdom of Axum, which was backed by the influence and subsidies of Rome and Byzantium. Dr. Glaser seeks to show that the founders of this Ethiopic kingdom were the Habāsa, or Abyssinians, who migrated from Himyar to Africa in the second or first century B.C.; when we first hear of them in the inscriptions they are still the inhabitants of Northern Yemen and Mahrah. More than once the Axumites made themselves masters of Southern Arabia. About A.D. 300 they occupied its ports and islands, and from 350 to 378 even the Sabæan kingdom was tributary to them. Their last successes were gained in 525, when, with Byzantine help, they conquered the whole of Yemen. But the Sabæan kingdom, in spite of its temporary subjection to Ethiopia, had long been a formidable State. Jewish colonies settled in it, and one of its princes became a convert to the Jewish faith. His successors gradually extended their dominion as far as Ormuz, and after the successful revolt from Axum in 378, brought not only the whole of the southern coast under their sway, but the western coast as well, as far north as Mekka. Jewish influence made itself felt in the future birthplace of Mohammed, and thus introduced those ideas and beliefs which subsequently had so profound an effect upon the birth of Islam. The Byzantines and Axumites endeavored to counteract the influence of Judaism by means of Christian colonies and proselytism. The result was a conflict between Sabā and its assailants, which took the form of a conflict between the members of the two religions. A violent persecution was directed against the Christians of Yemen, avenged by the Ethiopian

conquest of the country and the removal of its capital to San'a. The intervention of Persia in the struggle was soon followed by the appearance of Mohammedanism upon the scene, and Jew, Christian, and Parsi were alike overwhelmed by the flowing tide of the new creed.

The epigraphic evidence makes it clear that the origin of the kingdom of Sabā went back to a distant date. Dr. Glaser traces its history from the time when its princes were still but *Makārib*, or "Priests," like Jethro, the Priest of Midian, through the ages when they were "kings of Sabā," and later still "kings of Sabā and Raidān," to the days when they claimed imperial supremacy over all the principalities of Southern Arabia. It was in this later period that they dated their inscriptions by an era, which, as Halévy first discovered, corresponds to 115 B.C. One of the kings of Sabā is mentioned in an inscription of the Assyrian king of Sargon (B.C. 715), and Dr. Glaser believes that he has found his name in a "Himyaritic" text. When the last priest, Samah'all Darrah, became king of Sabā, we do not yet know, but the age must be sufficiently remote, if the kingdom of Sabā already existed when the Queen of Sheba came from Ophir to visit Solomon.

The visit need no longer cause astonishment, notwithstanding the long journey by land which lay between Palestine and the south of Arabia. One of the Minæan inscriptions discovered by Dr. Glaser mentions Gaza, and we now have abundant evidence, as we shall see, that the power and culture of the Sabæans extended to the frontiers of Edom. From the earliest times the caravans of Dedan and Tema had traversed the highways which led from Syria to the spice-bearing regions of Yemen. Three thousand years ago it was easier to travel through the length of Arabia than it is to-day. A culture and civilization existed there of which only echoes remain in Mohammedan tradition.

As we have seen, the inscriptions of Ma'in set before us a dialect of more primitive character than that of Sabā. Hitherto it has been supposed, however, that the two dialects were spoken contemporaneously, and that the Minæan and Sabæan kingdoms existed side by side. But geography offered difficulties in the way of such a belief, since the seats of Minæan power were embedded in the midst of the

Sabæan kingdom, much as the fragments of Cronarty are embedded in the midst of other counties. Dr. Glaser has now made it clear that the old supposition was incorrect, and that the Minæan kingdom preceded the rise of Sabá. We can now understand why it is that neither in the Old Testament nor in the Assyrian inscriptions do we hear of any princes of Ma'in, and that though the classical writers are acquainted with the Minæan people they know nothing of a Minæan kingdom.\* The Minæan kingdom, in fact, with its culture and monuments, the relics of which still survive, must have flourished in the gray dawn of history, at an epoch at which, as we have hitherto imagined, Arabia was the home only of nomad barbarism. And yet in this remote age alphabetic writing was already known and practised, the alphabet being a modification of the Phœnician written vertically and not horizontally. To what an early date are we referred for the origin of the Phœnician alphabet itself!

The Minæan kingdom must have had a long existence. The names of thirty-three of its kings are already known to us, three of them occurring not only on monuments of Southern Arabia but on those of Northern Arabia as well.

Northern Arabia has been as much a *terra incognita* to Europeans as the fertile fields and ruins of Arabia Felix. But here, too, the veil has been lifted by recent exploration. First, Mr. Doughty made his way to the ruins of Teima, the Tema of the Bible (Is. xxi. 14; Jer. xxv. 23; Job vi. 19), and the rock-cut tombs of Medain Salibh, wandering in Bedouin dress at the risk of his life through a large part of Central Arabia. He brought back with him a number of inscriptions, which proved that this part of the Arabian continent had once been in the hands of Nabatheans who spoke an Aramaic language, and that the Ishmaelites of Scripture, instead of being the ancestors of the tribe of Koreish, as Mohammedan writers imagine, were an Aramaean population, whose language was that of Aram and not of Arabia. The Sinaitic inscriptions had already shown that in the Sinaitic peninsula Arabic is as much an imported language as it is in Egypt and Syria. There, too, in pre-

Christian times, inscriptions were engraved upon the rocks in the Nabathean characters and language of Petra—inscriptions in which a fertile imagination once discovered a record of the miracles wrought by Moses in the wilderness.

Since Mr. Doughty's adventurous wanderings, Teima and its neighborhood have been explored by the famous German epigraphist, Professor Euting, in company with a Frenchman, M. Huber. M. Huber's life was sacrificed to Arab fanaticism, but Professor Euting returned with a valuable stock of inscriptions. Some of these are in Aramaic Nabathean, the most important being on a stèle discovered at Teima, which is now in the Museum of the Louvre. About 750 are in an alphabet and language which have been termed Protoarabic, and are still for the most part unpublished. Others are in a closely allied language and alphabet, called Lihhyanian by Professor D. H. Müller, since the kings by whose reigns the inscriptions are dated are entitled kings of Lihhyân, though it is more than probable that Lihhyân represents the Thamud of the Arabic genealogists. The rest are in the language and alphabet of Ma'in, and mention Minæan Sovereigns, whose names are found on the monuments of Southern Arabia.\*

The Minæan and Lihhyanian texts have been mainly discovered in El-Ola and El-Higr, between Teima and El-Wej—a port that until recently belonged to Egypt—on the line of the pilgrims' road to Mekka. The Protoarabic inscriptions, on the other hand, are met with in all parts of the country, and according to Professor Müller, form the intermediate link between the Phœnician and Minæan alphabets. Like the Lihhyanian, the language they embody is distinctly Arabic, though presenting curious points of contact with the Semitic languages of the north, as for example in the possession of an article *ha*. The antiquity of Lihhyanian writing may be judged from the fact that Professor Müller has detected a Lihhyanian inscription on a Babylonian cylinder in the British Museum, the age of which is approximately given as 1000 B.C.

\* It is possible that a Minæan population is meant by the Maonites of Judges x. 12, the "Mehunims" of 2 Chron. xxvi. 7.

\* The Minæan and Lihhyanian texts have been edited and translated, with an important introduction, by Professor D. H. Müller: "Epigraphische Denkmäler aus Arabien," in the "Denkschriften d. K. Akademie d. Wissenschaften zu Wien," vol. xxxvii. 1889.

We gather, therefore, that as far back as the time of Solomon, a rich and cultured Sabæan kingdom flourished in the south of Arabia, the influence of which, if not its authority, extended to the borders of Palestine, and between which and Syria an active commercial intercourse was carried on by land as well as by sea. The kingdom of Sabâ had been preceded by the kingdom of Ma'in, equally civilized and equally powerful, whose garrisons and colonies were stationed on the high-road which led past Mekka to the countries of the Mediterranean. Throughout this vast extent of territory alphabetic writing in various forms was known and practised, the Phœnician alphabet being the source from which it was derived. The belief accordingly that pre-Mohammedan Arabia was a land of illiterate nomads must be abandoned; it was not Islam that introduced writing into it, but the princes and merchants of Ma'in and Thamud, centuries upon centuries before. If Mohammedan Arabia knew nothing of its past, it was not because the past had left no records behind it.

A Power which reached to the borders of Palestine must necessarily have come into contact with the great monarchies of the ancient world. The army of Ælius Gallus was doubtless not the first which had sought to gain possession of the cities and spice-gardens of the south. One such invasion is alluded to in an inscription which was copied by M. Halévy. The inscription belongs to the closing days of the Minean kingdom, and after describing how the gods had delivered its dedicators

from a raiding attack on the part of the tribes of Sabâ and Khaulân, or Havilah, goes on to speak of their further deliverance from danger in "the midst of Misr," or Egypt, when there was war between the latter country and the land of Mazi, which Dr. Glaser would identify with the Edomite tribe of Mizzah (Gen. xxxvi. 13). There was yet a third occasion, however, on which the dedicators had been rescued by their deities 'Athtar, Wadd, and Nikrâh; this was when war had broken out between the rulers of the south and of the north. If the rulers of the south were the princes of Ma'in, whose power extended to Gaza, the rulers of the north ought to be found in Egypt or Palestine. Future research may tell us who they were, and when they lived.

But the epigraphy of ancient Arabia is still in its infancy. The inscriptions already known to us represent but a small proportion of those that are yet to be discovered. Vast tracts have never yet been traversed by the foot of an explorer, and there are ancient ruins which have never yet been seen by the eye of the European. What has been accomplished already with the scanty means still at our disposal is an earnest of what remains to be done. The dark past of the Arabian peninsula has been suddenly lighted up, and we find that long before the days of Mohammed it was a land of culture and literature, a seat of powerful kingdoms and wealthy commerce, which cannot fail to have exercised an influence upon the general history of the world.—*Contemporary Review*.

## THE DREADFUL REVIVAL OF LEPROSY.

BY SIR MORELL MACKENZIE.

IN order to explain what may at first sight appear to be an intrusion into a region altogether foreign to my line of professional work, I may perhaps be allowed to say that from a very early period of my career I have taken a particular interest in leprosy. Next to the skin, the throat is the part most often attacked by the worst form of the disease; and for this reason I have sought every opportunity of seeing it at close quarters. At the risk of falling into the "autobiographical" vein so dep-

recated by Mr. Balfour, I may add that I have made special investigations on leprosy in most of its European haunts, and also in Madeira; I may therefore claim the right to speak of it with some amount of personal knowledge. My attention was first directed to the subject nearly thirty years ago, when I was studying diseases of the skin under the celebrated Hebra at Vienna. In his wards I saw several cases of leprosy, which I understood came from the "Danubian Principalities" of those

days. In 1880 I examined a number of lepers in the Hospital de San Lazaro at Seville, in 1881 I saw several cases in the lazaretto at Funchal, and in 1884 I made extensive investigations in Norway, at Molde and Bergen, where I had the advantage of the assistance of Dr. Danielssen and Dr. Armauer Hansen, whose names are familiar as household words to the medical profession throughout the world in connection with leprosy. In Danielssen, who has watched the course of the disease among several generations of his countrymen, the doctrine of heredity finds its most uncompromising champion; in his son-in-law Hansen, the discoverer of the *bacillus lepræ*, contagion has naturally enough one of its most thoroughgoing supporters. One could hardly be in a better position for hearing both sides of this most important question than between those two distinguished men. In 1888 I saw a few cases in Italy in the Civil Hospital at San Remo.\* I have also had a few opportunities during the last twenty-five years of examining cases of leprosy here in London, in my own practice and that of others.

In this country most people, I imagine, were till lately in blissful ignorance of the fact that leprosy still walks the earth in all its original hideousness. Vague notions, derived partly from the Bible and partly from casual references in historical works, made up the sum of popular knowledge on the subject, and to the "general reader" leprosy was but a name, an extinct *deinotherium* of the palæontology of disease. Very few English doctors were better informed. The disease was either not referred to at all, or was dealt with in the most perfunctory way in lectures and textbooks of medicine. As Dr. Munro, whose writings on leprosy have done so much to diffuse a knowledge of the disease among medical men, points out, students a very few years ago might have gone out to fulfil their mission of healing in various parts of

the world without knowing that such a disease as leprosy was to be met with. Their first introduction to it was often when its existence was forced on them as a strange and disconcerting phenomenon in actual practice.

Space will not permit me to trace the early history of leprosy in ancient times, nor even to chronicle its course in Europe in the dark ages. My regret at being obliged to leave out some historical details which might prove interesting is lessened by the fact that an excellent summary of the researches of Hirsch,\* Munro,† and others, was published five years ago in this Review by Miss Agnes Lambert.

Judging from the long intervals of time which often elapsed without any mention of the disease, and the frequent notices of it by writers at particular periods, it would appear that between the twelfth and the fifteenth centuries the disease underwent considerable vicissitudes, becoming at times more prevalent and then again being much less common. These changes probably corresponded with alternating periods of want and prosperity, the disease becoming general when the vitality of the nation was lowered by long wars, pestilences, and famine. The extraordinary spread of the disease at the time of the Crusades led to the belief that it had again been imported into Europe from the East, and Voltaire characteristically says that this was the only permanent result achieved by these expeditions. There is, however, abundant proof that even if leprosy was reimported, it had really never left Europe. In the early part of the sixteenth century the scourge suddenly began to abate, and in a relatively short time it became nearly extinct in most of the countries of Europe.

There are, however, a few strongholds from which leprosy has never been driven. Spain supplies many centres of infection, but it is impossible to obtain exact statistics on the subject. We have, however, the testimony of Dr. Roman Viscarro to the fact that "from time immemorial lepers swarm in Spain, especially in the provinces of Asturias, Tarragona, Valencia

\* Invalids visiting this charming health resort need not be afraid of coming in contact with lepers. The few unfortunate victims of the disease are kept under close supervision in the Civil Hospital, which is situated on a high rock, and is separated even from the old town to which the building is adjacent. The part of San Remo which is frequented by those seeking health or sunshine in that delightful spot is as free from lepers as Brighton or Eastbourne.

\* *Handbook of Geographical and Historical Pathology.* By Dr. August Hirsch. Translated from the second German edition by Charles Creighton, M.D.

† *Edinburgh Medical Journal*, vols. xxii., xxiii., xxiv., xxv.

and Castellon." \* Dr. John Webster, who visited the leper hospital at Grenada about thirty years ago, found it tenanted by fifty-three inmates. He was informed that in 1851 the number of lepers in nine provinces of Spain was 284; this was probably far below the real number, as the natural tendency of lepers and their friends to hide their affliction is in Spain intensified by religious superstition, and the supineness of the authorities must lead to perfunctoriness in the difficult task of collecting statistics on the subject. Dr. Webster was informed that leprosy was believed to be spreading in Spain at the time of his visit. At Seville, in 1880, I found thirty-nine sufferers in the Hospital de San Lazaro. During the five years 1875-80, the total number of lepers admitted was eighty-four, the greatest number in any year having been twenty-one (1879-80). Seville itself supplied the largest contingent; then came Cadiz, Huelva, Almeria, Badajoz and Pontevedra. The figures, however, give an altogether inadequate idea of the prevalence of leprosy in these districts. As a high authority says: "In addition to the sufferers from those provinces who enter the hospital, there are many others who remain at home with their families, some maintained by them, others dependent on public charity; and probably only those seek shelter in the hospital who are destitute of all resource." † The late Dr. Jelly ‡ showed how extraordinarily prevalent leprosy is in the district known as La Marina, which takes in the sea-board of the two provinces of Valencia and Alicante; and he also brought forward proofs of the spread of the disease in the south of Spain in recent years.

Portugal has more lepers than any other European country, except Norway: but want of space prevents my showing its distribution. In Italy leprosy is met with on the Genoese Riviera; it was also found till quite recently at Comacchio, in the Ferrara marshes. In Sicily the disease has been steadily spreading for the last thirty or forty years. In annexing Nice, France took over with it a considerable number of Italian lepers belonging to La Turbie and neighboring places, but the disease is

now almost extinct in these localities. Small foci of leprosy still exist in Thessaly and Macedonia; the affection is not rare in some of the Aegean islands, e.g. Samos, Rhodes, Chios, and Mitylene, and it is extraordinarily prevalent in Crete. It is spreading to an alarming degree in Russia, especially in the Baltic Provinces, and it has lately been found necessary to establish a special hospital at Riga. In St. Petersburg cases are occasionally, though very rarely, met with; at least half of them are imported from outlying provinces. "Sporadic" cases are said to occur in some parts of Hungary and Roumania. In Sweden, where the disease was extremely prevalent up to the beginning of the present century, it seems now to have almost died out. Norway is unquestionably the most considerable leprosy centre in Europe at the present day, but the disease is curiously limited to particular regions, such as the districts round Bergen, Molde, and Trondhjem.

In almost every other quarter of the globe leprosy is rife at present, and wherever it exists it seems to be slowly, but surely, extending its ravages. It is impossible to estimate even approximately the total number of lepers now dying by inches throughout the world, but it is certain that they must be counted by millions. It cannot be comforting to the pride of England, "the august mother of nations," to reflect that a very large proportion of these wretched sufferers is to be found among her own subjects.

That leprosy has spread considerably in recent times there can be no manner of doubt. Within the last fifty years the seeds of the disease have been sown in several districts where it was previously unknown, and already the accursed crop has begun to show itself. As has been shown by Dr. Munro,\* the seeds of leprosy take something like half a century to mature, and there is every prospect that unless the natural evolution of the scourge can in some way be prevented, a terrible harvest will be reaped before many years are past. To say nothing of the notorious case of the Sandwich Islands, where leprosy, imported about the year 1850, either by whaling ships manned by sailors from leprous regions or by Chinese immigrants, has since made such fearful progress, we

\* *El Siglo Medico*, Oct. 21, 1883.

† Dr. Ph. Hauser, *Estudios Medico-Sociales de Sevilla*, Madrid: 1884, p. 319.

‡ *Brit. Med. Journ.*, July 23, 1887.

\* *Loc. cit.*

have the case of Australia, where it has been carried by the Chinese, and of America where several distinct centres of infection have appeared within living memory. Thus there is California, where it was imported by the "Heathen Chinese;" some of the North-Western States, where it was brought from Norway by Scandinavian emigrants; and Salt Lake City, to which it was conveyed by Mormon converts from the Sandwich Islands.\* In Louisiana, where last century leprosy prevailed so extensively that a hospital for it was founded in 1785, it again showed itself in 1866, in a woman whose father was a native of the South of France. From this fresh centre the disease has spread to such an extent that Dr. Blanc recently saw forty-two cases in New Orleans alone. The disease also appeared in Oregon among the Chinese, but was promptly checked, and in South Carolina a limited outbreak occurred between 1847 and 1882. Sixteen cases were reported, the first victims being Jews belonging to families which had emigrated to the United States early in the century; several of the rest were Jews, but there were also some native Americans, and at least one Irishman among them.

In France the disease is also extending, as we learn from a communication made to the Académie de Médecine of Paris on the 14th of October, 1887, by Dr. Besnier, the distinguished physician of the Hôpital St.-Louis. This authority stated that, since France had extended her colonial possessions, French soldiers, sailors, traders, and missionaries have fallen victims to leprosy in large numbers.

In the United Kingdom we have at present no leprosy of home growth, but we are probably never without a few cases among those who have lived for some time in countries where the disease is common. From an unofficial return, recently published in one of the medical journals, it appears that in the early part of the present year there were several patients in London suffering from leprosy. There is, or was quite lately, a boy in a large public school in whom there are the strongest grounds for suspecting the existence of leprosy in the early stage: the disease is supposed to have been communicated by vaccination in the West Indies. It is be-

yond question also that there are many other cases in this country at the present moment which are carefully concealed from the knowledge of every one but the medical adviser. Nearly every skin specialist must be able to attest this fact.

But the most striking extension of the disease has been witnessed in the Sandwich Islands. Here Dr. W. Hillebrand saw the first case—the first spark of the conflagration—in 1853, "in a thinly-populated district of Oahu, about twenty miles from Honolulu, in a small village near the sea."† The disease, however, was not officially recognized till 1859. At that time "only a few cases became known, but with every subsequent year the leprous patients presenting themselves at the public dispensary increased in number, until during 1864 and 1865 it was considered of quite ordinary occurrence that lepers should apply for relief."‡ A census taken by the Hawaiian Government about that time gave the number of *known* lepers, suffering from the tubercular form of the disease, as 230 out of a population of 67,000. In 1866 the segregation settlement at Molokai was opened, and since that time more than 3,000 cases have been received there. The last report of the Hawaiian Board of Health gave the total number of lepers in the settlement on the 1st of April, 1888, as 749, but Dr. Prince A. Morrow, of New York, who visited Molokai in the early part of this year, puts the present number at nearly 1,100.

In the West Indies the disease has been steadily extending its ravages for many years back. Thus at Trinidad, where in 1805 the three first victims could still be pointed out, an investigation ordered by Governor Woodford in 1813 revealed seventy-three lepers in a total population of about 32,000. Two years later there were seventy-seven.† The evil was unfortunately not considered of sufficient magnitude to need State interference. Ten years later, however, a half-hearted attempt at segregation was made, but in 1840 it was found that the number of sufferers had so much increased that a proposal to estab-

\* Letter quoted by C. N. Macnamara, *Leprosy a Communicable Disease*, 2nd ed. London: 1889, p. 61.

† *Ibid.*

‡ For the information above given relative to Trinidad, I am indebted to the work already cited, *La Lèpre est Contagieuse*, Trinidad, 1879: p. 264, *et seq.*

\* This fact was communicated to the New York Academy of Medicine by Dr. P. A. Morrow on the 6th of June, 1889.

lish a settlement on a little island a few miles off had to be abandoned, because it was too small to hold them. In 1878 the number of lepers was officially stated to be 860 in a population of 120,000. These figures have an eloquence of their own which requires no comment from me to emphasize the startling truth which they convey—namely, that at Trinidad in the years between 1813 and 1878 leprosy increased nearly four times as rapidly as the population! We shall see presently to what cause it was undoubtedly attributable.

In British Guiana the increase of leprosy in recent years has been not less remarkable. In 1858 an asylum for lepers was established at the mouth of the Mahaica Creek. "On the 31st of December, 1859, there were only 105 inmates at the asylum. In 1869 they had increased to 300, and the place could hold no more. Increased space was provided, and in 1880 we find from the official reports that over 500 were dealt with. Around this leper asylum, outside its boundaries, there are large numbers of lepers not included in these returns."\* Dr. Hillis, the best living authority on the subject, informs me that the increase of leprosy in British Guiana during the past ten years has been very great, although during that period the general sanitary condition of the colony has improved. He estimates that at the present time there must be more than a thousand lepers in British Guiana, a number equal to 1 in 250 of the whole population. Considering the very high death-rate of the disease—16 per cent. annually—it is clear that it is spreading with great rapidity.

When New Zealand was first taken possession of by the English, a peculiar form of leprosy akin to the anæsthetic form was found to exist. Dr. John Myles, of Taranaki, who recently paid a visit to this country, informed me that the disease is most common in a zone of about twenty-five miles round Lake Taupo. The whites, it appears, do not become leprosy, except the "Pakeha Maoris," as the whites are called who live much with the Maoris or intermarry with them. No system of restraint exists now, but when the Maoris possessed the country they killed those who became leprosy. Fear of contracting

the disease prevented them indulging their cannibal propensities in relation to the poor lepers. It has been noticed in recent years that there has been considerable increase in the amount of leprosy, though it is still principally confined to the neighborhood of Lake Taupo.

In India, the last official report gives 135,000 as the number of lepers, but Mr. E. Clifford says\* that there can be little doubt that they already exceed 250,000, and that their numbers are still growing. In Canada it has recently been discovered that the cases in the lazaretto at Tracadie do not comprise all the lepers in New Brunswick, and a considerable number of other cases are believed to exist, especially among the French residents in the northern part of the province.† At the Cape, though it was recently denied officially that leprosy is increasing, a strong impression prevails that the disease is extending. The same may be said of our Australian colonies, and the statement to that effect made by the Prince of Wales at the first meeting of the committee of the "Father Damien Memorial Fund" at Marlborough House has not, so far as I know, been called in question. Such a state of things may well cause anxiety, not only to those responsible for the welfare of our colonies, but to all lovers of humanity.

The facts above set forth represent an unspeakable amount of suffering to many races whose destinies we have taken into our keeping, but besides this they indicate a possible danger to ourselves. Leprosy has before now overrun Europe and invaded England, without respecting the "silver streak" which keeps off other enemies; and it is perfectly conceivable that, under certain circumstances, it might do so again. It is well known that, in recent years, our countrymen whose lot is cast in places where the disease is indigenous have ceased to show the immunity from its attacks which was once thought to be their privilege. Can all this misery be prevented? I do not hesitate to answer, Yes. It may be doubtful whether the disease can be stamped out, but it is certain that its advance can be checked, and that its ravages can be confined within comparatively narrow limits. How is this to be done? Only in one of

\* John D. Hillis, F.R.C.S.I., late Medical Superintendent of the Leper Asylum, British Guiana. *Time*, June 1889: pp. 77, 78.

\* *Father Damien*. London: Macmillan & Co. 1889: p. 153.

† *British Medical Journal*, August 3, 1889.

two ways—by eliminating the cause of the disease, or by preventing its transmission.

The former of these methods is unfortunately impossible, for we are at present entirely in the dark as to the cause of leprosy. The subject has for centuries been a favorite playground for the "scientific imagination," and, as Cicero said of the philosophers, there is no absurdity which has not found defenders among the various scientific pundits who have wrestled with the problem. Climate, soil and race have each been tried and found wanting, for the disease exists in every kind of climate and on every variety of soil, and no race is exempt from it, although certainly some divisions of the great human family appear to be more open to its attacks than others. Almost since the dawn of medical speculation food has been regarded by many as the *fons et origo mali*, and there has been a remarkable "stream of tendency" toward fixing on fish as the particular esculent at fault. As far back as the days of Aretæus, the eating of fish and milk at the same meal was reputed to be an infallible cause of leprosy; the old proverb of Provence, "*Le poisson fait devenir ladre*," represented a popular belief which has for centuries been almost universally prevalent in European haunts of leprosy; and even at the present day, when the theory has completely "deliquesced" under the solvent action of what Magendie called *le fait brut*, a distinguished surgeon still tenderly hugs his old *mumpsimus*, and sees putrid fish\* at the bottom of every case of leprosy, though the patient may have never had a chance of eating fish of any kind. The "exquisite reason" appears to be that, if the leper himself did not, some of his ancestors may have done so. It is, in fact, a case of original dietetic sin, fish being the pathological apple

whose mortal taste  
Brought death into the world and all our woe.

It is interesting, however, to observe that the Maoris in New Zealand attribute the peculiar form of leprosy from which they suffer to eating a small carp which exist in large numbers in a diseased state

\* Raymond (*Histoire de l'Éléphantiasis*. Lausanne, 1767, p. 23) tells us that in the South of France it was not putridity, but the opposite condition, that was dreaded. "*Les gens du pays attribuent la cause occasionnelle du mal . . . à l'usage du poisson mangé trop frais.*"

in the lake of Taupo. White of Selborne attributed the disappearance of leprosy from this country to "improved agriculture and an abundant supply of fresh food and vegetables." Beyond all question good food is an essential factor in the preservation of health, but it does not follow that bad food is the cause of leprosy. The same may be said as to hygienic conditions. Malaria may conceivably predispose to leprosy, as to other diseases, by weakening the constitution—or, as modern pathological *illuminati* phrase it, "lessening the resistance of the tissues to the attacks of microbes"—but there is nothing to show that it has any more direct effect. The gratuitous "primary dyscrasia" of Danielssen and Boeck; the less mysterious but not less gratuitous "defect in development of certain elements in the skin" of Vandyke Carter; the "absence of potash in the blood" of Hjaltelin (of Iceland), and the "absence of salt in the food" of Munro, are all very pretty theories as they stand, but they are rather to be admired than adopted. At present the bacillus holds the field; but that "fearful wild fowl" must be known in all its ten "categories" before our acquaintance with it is likely to prove of practical service. Especially one would wish to know whence it comes. At the present time there is a tendency to trace disease germs to our "poor relations," but animals can hardly be held accountable for the manufacture of leprosy, as it is very doubtful whether they are themselves susceptible of it. It would be curious, however, if after all the bacillus of leprosy should be traced to fish; I am not aware that it has ever been looked for in them, or that any attempts have been made to inoculate them with the disease.

If, however, the origin of leprosy is still one of the great unanswered riddles of the universe, there is not the same mystery as to the mode of its transmission. The evidence in favor of contagion is to my mind quite overwhelming. The contagiousness of the disease was never doubted till it had nearly died out; men ceased to believe in contagion when they no longer saw daily instances of it. The whole system of medical police by which leprosy was finally driven out of Europe was based on the notion that it was contagious, and no measures not based on that principle have ever had the slightest effect in checking its

ravages. The alarming spread of this loathsome pest in recent years is in my opinion due to the fact that for some time the opposite doctrine gained the ascendancy, and held captive the minds of men. For this pernicious error, and for all the disastrous consequences that have flowed and continue to flow from it, the Royal College of Physicians of London is chiefly responsible.

Though the miserable story is too well known to those who are interested in the subject of leprosy, it may be well briefly to recall the facts. In 1862, some alarm being felt as to the spread of leprosy in Barbadoes, the Colonial Office requested the College of Physicians to draw up a series of questions relative to the nature, causes, and prevalence of the disease. A form containing these questions was circulated throughout the colonies, and upward of 250 replies were received from medical men in different parts of the world, exclusive of those from Her Majesty's Consuls and of communications from the Governors of British colonies. The mass of information thus obtained was then submitted to the College, which undertook, apparently with a lightness of heart worthy of M. Émile Ollivier, to "collate, digest, and report upon" it.

A committee was chosen by the College to discharge this important public duty, but there is every reason to believe that only two of the physicians on the committee had the smallest practical acquaintance with leprosy. One of them, the late Dr. Owen Rees, had met with one remarkable case, and another, Dr. Gavin Milroy, paid a hurried visit to Demerara, where he was egregiously hoaxed even by dull-witted lepers.\*

\* A striking instance related by Dr. Hillis (*Timahri*, June 1889 : p. 79) will suffice : "One man stated to Dr. Gavin Milroy when he was in Demerara, at the penal settlement, that he believed his leprosy arose from the salt diet the prisoners are accustomed to, whereas in fact his wife had suffered from leprosy previous to his being sentenced to penal servitude, and a child of this same man and woman died at the leper hospital at Mahaica." But what must always discredit Dr. Milroy's judgment is the incredulity with which he received Dr. Hillebrand's account of the outbreak of leprosy in the Sandwich Islands : the subsequent course of events is a terrible commentary on the inability to appreciate facts "gross as a mountain, open, palpable," which inspired the unlucky manifesto of 1867.

The mental condition of the other members of the committee must have been *tabula rasa* of ideal blankness on everything connected with leprosy. One can only marvel at the sublime self-confidence with which such a body—seeing as it did with only one eye, and that, as will presently be shown, a dim or distorted one—undertook to guide the footsteps of Government over ground so difficult even for the clear-sighted. The result of their labors was the *Report on Leprosy* published in 1867, an ill-starred document which has probably done more to propagate the disease than any other single agency since the Crusades. In that report the *Patres Conscripti* of English medicine expressed the following opinion, each individual sentence and clause of which is absolutely and demonstrably erroneous :

The all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the diseased. The evidence derived from the experience of the attendants in leper asylums is especially conclusive on this point.

The few instances that have been reported in a contrary sense either rest on imperfect observation, or they are recorded with so little attention to the necessary details as not to affect the above conclusion.

That leprosy is rarely, if ever, transmissible [in married life], when one of the parties has no tendency whatever to the disease, is the opinion of the great majority of the respondents who have had the largest opportunities of observation.\*

If this deliverance had been merely a theoretical opinion promulgated by the College of Physicians for the edification of the few medical men in this country who concern themselves with its utterances, no one would have had any right to complain. But in this case the decision that leprosy was not contagious led at once to practical consequences of the most far-reaching importance. The measures devised by humane and enlightened statesmen for the mitigation of the scourge were abandoned ; the leper-houses throughout Her Majesty's dominions were thrown open, each discharging its measure of pollution into the stream of healthy life near it ; and a general relaxation of sanitary dis-

\* *Report on Leprosy by the Royal College of Physicians, prepared for Her Majesty's Secretary of State for the Colonies.* London : 1867, p. lix.

cipline with regard to leprosy supervened.\* It may without much exaggeration be said that if leprosy slew its thousands before, it has slain its tens of thousands within the confines of the British Empire since 1867. Even outside the limits of Her Majesty's sway the evil effect of this decision has been felt, for the authority of an institution which was supposed to be the concrete embodiment of medical science in this country necessarily had great weight on the minds of some foreign practitioners. That this unfortunate *Report on Leprosy* did not do still more harm is only due to the fact that the dangerous doctrine which it was intended to enforce was not universally acted upon; the practical common sense of mankind in many places where leprosy has its home refusing to be led astray by theoretical opinion. Of

course I do not blame those responsible for the *Report* for not having known better; they acted according to their lights, and it can hardly be imputed to them as a crime that these "lights" proved *ignes fatui* to those who looked to them for guidance. What they cannot, however, be readily absolved from is the having undertaken to decide a question with which they were quite incompetent to deal.

But if the judges were incompetent, it is no less certain that many of the witnesses were untrustworthy. The answers received to the questions in the circular afford ample proof that many of the respondents knew little and cared less about the disease. The truth is that the mystery still surrounding leprosy is in great measure due to the want of careful study by a sufficiently large number of observers. The subject is so repulsive that it has been, and still is to some extent, "segregated" by medical men from their mental purview as a pariah among diseases. But while positive evidence of contagion of the most striking kind is contained in the very *Report*\* which denies its existence, the College, forgetting the cardinal principle that even one well-attested fact outweighs any amount of negative statements, seems to have settled the matter by the simple expedient of counting rather than weighing the opinions submitted to them. One is reminded of the story of the Frenchman accused of stealing a horse, who, when the judge said, "Three witnesses saw you do it," promptly replied, "Ah, sir! three thousand could easily be found who did not see me."

Let us now consider the conclusions of the *Report* somewhat more closely. The first statement, that "the all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the diseased," is to-day exactly the reverse of the truth. For this

\* As evidence of this I need only cite two instances, not more flagrant than hundreds of others, but which happen to be the first that come to hand. Dr. Munro says (*Edin. Med. Journ.*, vol. xxv. p. 424): "It is sad to think that in any colony of England a leper should be allowed to keep a school, as I have seen to my horror in St. Kitt's. In misgoverned Crete such things might be, but done in an English colony, with the tacit sanction of the Government, instructed by the Royal College of Physicians of London as to the non-contagious nature of the disease, the latter acting on utterly worthless negative evidence—so done, such an affair is a disgrace to humanity!" Again, take the following plain unvarnished tale from Dr. Hillis (*Times*, June 1889: p. 80): "A respectable young lad became leprosy through, as I believe, playing with a boy who had leprosy and who lived further down the street. When seen he was in an advanced stage of tubercular leprosy, covered with sores, and he was sent home and treated by the late Sir Erasmus Wilson, and the family left the house. I subsequently learned that another family shortly took over the same house without its having undergone any purification or disinfecting, and it must be remembered the boy had been confined for months to one room and was covered with these sores. Had he died of some endemic disease considered contagious, but questionably so, how much money would have been spent on painting, papering, &c. by the authorities! But in the case mentioned no such steps were considered necessary. I am not finding fault with disinfection as carried out in Georgetown—far from it; it is merely contended that, owing to the opinions that the Executive have to guide them" (i.e. the Report of the Royal College of Physicians), "they would not be justified under the present rulings on the subject in going to any expense under the Public Health Ordinance, as leprosy is not considered a contagious disease."

\* I need only cite the evidence of Drs. Godding and Stevenson of Barbadoes (*Report*, p. 32), Dr. Aquart of Grenada (*Ibid.* p. 36), Drs. Manget, Reed, Pollard, Duffey, Carney, and Van Holst of British Guiana (*Ibid.* pp. 45-46), the Proto-medico of Corfu (*Ibid.* p. 67), Drs. Regnaud and Bolton of Mauritius (*Ibid.* p. 86), the Civil Commissioner of Seychelles (*Ibid.* p. 90), and Mr. Macnamara, then of Mozambique (*Ibid.* p. 141).

revolution in opinion we are indebted chiefly to the *Report* itself. The enormous increase of leprosy consequent on the free trade in the disease which followed the appearance of that document opened the eyes even of fanatical non-contagionists. It is a fact of the greatest significance that almost without an exception the men who know most of leprosy, who have lived in the midst of it, are those who believe most firmly in its contagiousness. This is true not only of medical men, but of the missionaries and others who tend the unfortunate sufferers. Such a consensus of opinion is not to be lightly set aside. *Securus judicat orbis terrarum*; the instinct of mankind has more than once been right in the domain of medicine, when science was at fault.

It was not long before the theoretical conclusions enunciated with such self-satisfied optimism by the framers of the *Report* were rudely shaken by the stern logic of facts. The tide of leprosy, as if in mockery of these medical Canute's, rose ever higher; proofs of the contagious character of the disease were forthcoming on all sides;\* and it became only too evident that in seeking counsel from the

College of Physicians the Government had placed its trust in a hopelessly futile oracle.

The "pity of it" seems all the greater when it is remembered that the medical profession in the British Empire could at that time have furnished plenty of distinguished men who had given much attention to leprosy, and had seen it in its worst haunts. A thoroughly competent tribunal of experts could have been formed, from whom a report of permanent value might have been obtained.

Proceeding to the next point—viz. that "the evidence derived from the experience of the attendants in leper asylums is especially conclusive on this point" (non-contagion)—I may remark that, granting for a moment that negative evidence on a matter of this kind is worth anything at all, the argument proves far too much. Exactly the same thing may be said of the attendants in Lock hospitals. The same argument was used to controvert Koch's view as to the contagiousness of consumption, but was rightly held to have no weight. It is not true, however, that attendants on lepers are never attacked. The College might profitably have recalled the historical problem submitted to the Royal Society by Charles the Second before building an argument on an imaginary foundation. Its own *Report* contains several instances in which persons who had the care of lepers contracted the disease. The most striking of these is the case of Dr. Robertson, medical superintendent of the Carieuse leper establishment, Seychelles,\* but there are others equally remarkable.† Several cases of the same kind have also been recorded by Hansen,‡ and Father Étienne.§ One of those mentioned by the latter observer is that of Dr. Goddard, a young French physician, who, in order to demonstrate in his own person the non-contagiousness of leprosy, went to Palestine and took up his abode in a lazaret-house. The poor fellow fell a victim to his scientific enthusiasm, and died of leprosy in a few years. Other

\* In 1869 Drogat-Landré supported the contagionist doctrine in a powerful work (*De la Contagion seule Cause de la Lèpre*). In 1873 the "conqueror worm" which carries the infection was discovered by Hansen. In 1874 Dr. Vandyke Carter, whose investigations in nearly every part of the world where leprosy is found entitle him to rank as the foremost living authority on the disease, was driven by the facts which he himself had collected to "find salvation" in the contagionist fold. A few years later the *coup de grâce* was given to the *Report* by Dr. W. Munro, formerly medical officer of St. Kitt's in the West Indies, in a series of papers (*Elin. Med. Journ.*, vols. xxii., xxiii., xxiv., and xxv.) which form a storehouse of facts from which every subsequent writer has freely drawn. I need only mention two other works which have been several times referred to in the course of this article, and in both of which the same conclusion is enforced—Frère Étienne's little book (*La Lèpre est Contagieuse*, Trinidad, 1879) and the magnificent monograph of Mr. J. D. Hillis (*Leprosy in British Guiana*, London, 1881). In 1884 Miss Agnes Lambert published an excellent article (already referred to) in this Review (August and September, 1884). In 1887 Dr. Beanier brought additional proofs of the contagiousness of leprosy before the Académie de Médecine in Paris, while in this country Archdeacon Wright sounded the alarm as to its increasing prevalence throughout the world (*Times*, Nov. 8th, 1887).

\* *Report on Leprosy*, p. 90.

† See replies by Drs. Goding and Stevenson, p. 32; Dr. Mantell, p. 41; Mr. N. C. Macnamara, *Ibid.*; Mohamed Naem, p. 177; and Surgeon-Major J. Rose, p. 199.

‡ *British and Foreign Medico-Chirurgical Review*, April, 1875.

§ *La Lèpre est Contagieuse*, p. 122 et seq.

cases are reported from South America.\* But what need is there for the laborious collection of such facts when there is the grand object-lesson of Father Damien's life and death before the whole world? Dr. Hoffmann, the medical officer of Molokai, has recently fallen a victim to his devotion, and it is said, though I know not with what truth, that one of Damien's colleagues is now also a leper. In addition to all this we have the crushing fact that, out of sixty-six *kokuas*, or helpers, on the island in 1888, twenty-three were known to have contracted the disease, while in eleven more its existence was suspected. I have taken some trouble to show that the supposed immunity of attendants is a pure myth, for it is really the corner-stone of the vast edifice of error erected by the College of Physicians in 1867.

The argument from married life has just as little foundation. Several illustrations of contagion between husband and wife are given in the *Report* itself, and others are brought forward by Frère Étienne † and Hillis. The former relates the case of a Venezuelan lady whose husband died of leprosy. Six years afterward she herself became a leper. One of Hillis's cases is particularly instructive. A shopkeeper whose business often took him to the asylum became leprous. For ten years his wife remained free from the complaint. The case was well known, and Dr. Hillis was frequently asked to explain how it was, if leprosy was contagious, that she had escaped so long. In the course of time, however, she became an undoubted leper ‡. The moral of this striking case is that contagion would be more often noticed if suspected persons could be kept sufficiently long under observation. In precisely the same way the case of Keannu, the Hawaiian convict inoculated by Dr. Arning on the 5th of November, 1885, used to be cited as a proof that the disease could not be transmitted in that way. The poison took its own time, however, and the man is now an undoubted leper.

But leaving all other questions out of consideration, the crucial question remains: If leprosy is not contagious, how is it that it spreads? Granting that he-

redity plays a certain part in its transmission, the sudden outbreak of the disease in races previously altogether free from it can hardly be explained by ancestral proclivity. The College of Physicians had before their eyes the great fact of the invasion of the virgin soil of Hawaii by leprosy, but, like their prototypes in *Tristram Shandy*, "they concerned themselves not with facts—they reasoned." We may suppose them to have argued that, as leprosy is not contagious, therefore it cannot spread from one nation to another. All evidence to the contrary was dismissed as impertinent. Sterne must have foreseen these learned Thebans when he described the disputations of the Strasburg doctors: "It happens otherwise," replied the opponents. "It ought not," said they."

Nothing which the College of Physicians may do in the future can wipe out the effects of their *Report*, or the incalculable misery which it has caused. When the public mind at last was aroused on the subject, just twenty years after the issue of the first *Report*, a second one appeared (July 15, 1887), in which it is admitted that there is a case for inquiry! I venture to suggest that, by way of making some reparation for the past, they should send some of the men of light and leading among them to see for themselves what leprosy is, and to study it, not vicariously through the eyes of others, but face to face in its native haunts. What is wanted is that the full light of modern medical science should be thrown on the dark places where the monster lurks. If some of the eminent scientific men who were invited to join the Marlborough House Committee could study leprosy in its home, great results might be obtained. If an experienced pathologist like Sir James Paget could spend some time in India, important facts as to the nature of leprosy might be discovered; or if a distinguished physician like Sir Andrew Clark could have five years at Molokai, he might perhaps slay the Sphinx of leprosy, or at any rate evolve a system of diet calculated to be of service to those subjected to the contagion of that dire disease. To send out from time to time a young doctor on a scientific *Wanderjahr* among the lepers, as proposed by the Marlborough House Committee, seems to me mere trifling. Is it likely that a fledgling just escaped from the academic nest should "come, see, and

\* *Boletín de Medicina del Cauca*, No. 1, p. 13 (Dr. Tenorio), and p. 16 (Dr. Escobar).

† *Op. cit.*, p. 95.

‡ *British Medical Journal*, Nov. 5, 1887.

conquer" where Danielssen and Boeck, Vandyke Carter, Hansen, Munro, Arning and Hillis have failed?

Another plan which might lead to some discovery of real importance would be the offer of a prize sufficiently large to tempt men of the highest eminence to compete. Mr. Macnamara suggests\* that the Damien Memorial Fund should offer "a prize of 500*l.*, open to all comers, for the best essay and original research regarding the bacillus lepræ." This is a step in the right direction, but it is not enough. M. Pasteur received something like 20,000*l.* for his discoveries in the silkworm disease. If he could only be induced to grapple with the leprosy problem, there might be a chance of a "protective virus" being discovered which should make people exposed to the contagion of leprosy invulnerable to its attack.

In the meantime the only way of coping with leprosy is to deal with it as a thing dangerous to mankind. It would be criminal to allow the scourge free play because academic pedantry is not satisfied as to the exact mode of its transmission. No half measures will suffice; *écarter l'infâme* in a new sense must be the motto of those entrusted with the task. Our forefathers did not allow themselves to be disturbed by "philosophic doubt," but stamped out the pest by a system of "Thorough" which Strafford might have envied. The sick must be kept strictly apart from the healthy, and all suspicious cases should be detained in quarantine and jealously watched. For this purpose special medical inspectors should be appointed, each with a defined district under his constant personal supervision. I should not be disposed to insist on the separation of married couples; lepers are not prolific, and hereditary contamination has now been shown to be almost a *quantité négligeable*. † There is, of course, the risk of contagion;

but if husbands or wives are willing to encounter it, I do not see why they should be prevented. We have the testimony of Father Damien to the good effect of allowing married people to remain together.\* There must always be a certain amount of hardship in segregation, but if lunatics can be made comfortable and even happy in confinement, so may lepers. A vast amount of nonsense has been talked about the horrors of segregation; if there is any discomfort beyond the separation from friends and the suffering caused by the disease, it is either due to neglect on the part of the authorities or to want of funds. The lepers I saw in Norway were, with the exception of those in the very last stages of the disease, clean, cheerful, and busy—the men in the workshops, the women at domestic work, and the children in their classes. The last was certainly a painful sight, but the little patients themselves were not at all gloomy. Those I saw at Seville were less cheerful, but that may have been due to the quasi-monastic atmosphere which surrounded them. Dr. Webster, however, says † that the lepers whom he saw at Grenada were quite a "merry family," dancing, twanging the guitar with their crooked stumps of fingers, and warbling ditties with such remnants of voice as were left them. Frère Étienne's testimony as to Trinidad is not less striking, ‡ and Mr. Clifford tells us that even at Molokai there is little sign of unhappiness.

Apart altogether from the *salus populi*, which must ever be the supreme law in such matters, there can be no doubt that segregation, if properly carried out, is the best thing for the sufferers themselves. If I had the misfortune to be a leper myself, I should prefer to be where one touch of nature makes the whole world kin, though it were only by fellowship in suffering, to being an object of horror to all around me. Medicine, though it cannot cure, can do

\* *Leprosy a Communicable Disease*: 2nd ed. London, 1889: p. 4.

† Dr. Armauer Hansen, who recently visited the Norwegian lepers in Wisconsin, Minnesota and Dakota, found that the offspring of 160 lepers who had emigrated to America had remained free to the third generation. (*Archiv für Dermatologie*, 1889, Heft iii.) Again, there is the fact that, although during eighteen years 2864 persons were consigned to Kalawao (Molokai), only twenty-six children were born during that period, and of these only two have become lepers.

\* E. Clifford, *Father Damien*, p. 82.

† *Medico-Chirurgical Transactions*, vol. xliii., 1860: p. 29.

‡ *Op. cit.*, pp. 254-55. "La tristesse n'est pas du tout, comme je l'ai lu plus d'une fois, un effet inévitable de la maladie. Je puis bien attester qu'il n'y a pas au monde école ou collège plus gai, plus bruyant, où l'on joue et babille plus, qu'à Cocorite. Tout est oublié; certainement on n'est pas un lépreux, on est un pensionnaire; et la reine est bien honorée d'héberger de tels personnages."

much to mitigate the incidental miseries of leprosy, and nowhere can treatment be so well applied or the necessary nursing so intelligently carried out as in places where special experience has engendered special skill. Sanitary arrangements must be of the highest attainable perfection, as the concourse of foul smells in leper-houses is especially apt to breed disease, not only among the inmates but among those in charge of them. The food must be abundant and nutritious, and plenty of occupation should be provided for such as can work. Nor should amusements be neglected. It was by attention to all these things that Father Damien was able to humanize the poor outcasts for whom he gave his life; by these means he transformed a sink of moral as well as physical corruption into a peaceful and happy community. There is no reason why this memorable example should not bear fruit wherever lepers are to be found. There is no lack of self-sacrificing men whose hearts are filled by the enthusiasm of humanity; what the Catholic Church beautifully calls the "devout female sex" will always be ready wherever nurses are needed; and of doctors we shall never fall

short when there is such a field for scientific discovery. The only thing wanting is money. The stamping out of the most grievous disease which flesh is heir to will no doubt be an expensive undertaking; but is this great and wealthy country to count the cost when poor States like Norway and Hawaii are lavishing their scanty treasure in furthering the good work?

It is to be feared that the wave of philanthropic sentiment which, under the combined influences of pity, fear and fashion, rose so high a few months ago, is already subsiding. De Quincy gauged the English character correctly when he said that, so far from being phlegmatic, we are the most excitable people on earth; unhappily our excitement, which is so easily fanned into a blaze, burns itself out all the more quickly. As Macaulay observed, our virtue goes to sleep for several years after one of our periodical outbreaks of morality. Let not the same be said of our philanthropy! It will be deplorable, and indeed disgraceful, if our desire to do something to check the advance of leprosy is allowed to die out with the "scare" which engendered it.—*Nineteenth Century*.

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## CHRISTMAS LEGENDS.

### I.

A NATIVITY BY FRA FILIPPO LIPPI; AS EXPLAINED BY A PIOUS FLORENTINE GOS-  
SIP OF HIS DAY.

BY VERNON LEE.

"Now I cannot affirm that things did really take place in this manner, but it greatly pleases me to think that they did."—Fra Domenico Cavalca, *Life of the Magdalen*.

THE silly folk do not at all understand about the birth of our Lord. They say that Our Lord was born at Bethlehem, and because the inns were all full, owing to certain feasts kept by those Jews, in a stable. But I tell you this is an error, and due to little sense, for Our Lord was indeed placed in a manger, because none of the hosteleries would receive Joseph and the Blessed Virgin, but it took place differently.

For you must know that beyond Bethlehem, which is a big village, walled and

moated, of those parts, lies a hilly country, exceeding wild, and covered with dense woods of firs, pines, larches, beeches, and similar trees, which the people of Bethlehem cut down at times, going in bands, and burn to charcoal, packing it on mules to sell in the valley; or tie together whole trunks such as serve for beams, rafters, and masts, and float them down the rivers, which are many, and very rapid. In these mountains then, in the thickest part of the woods, a certain man of the woodcutting trade bethought him to build him a house wherein to store the timber and live, himself and his family, when so it pleased him, and keep his beasts; and for this purpose he employed

certain pillars and pieces of masonry that stood in the forest, being remains of a temple of the heathen, the which had long ceased to exist. And he cleared the wood round about, leaving only tree stumps and bushes; and close by in a ravine, between high fir trees, ran a river, always full to the brim even in midsummer, owing to the melting snows, and of greenish waters, cold and rapid exceedingly; and around, up hill and down dale, stretched the wood of firs, larches, pines, and other noble and useful trees, emitting a very pleasant and virtuous fragrance. The man thought to enjoy his house, and came with his family and servants, and horses and mules and oxen, which he had employed to carry down the timber and charcoal.

But scarcely were they settled than an earthquake rent the place, tearing wall from wall and pillar from pillar, and a voice was heard in the air crying: "Ecce domus domini dei." Whereupon they fled, astonished and in terror, and returned into the town. And no one of that man's family ventured henceforth to return to that wood, or to that house, save one called Hilarion, a poor lad and a servant, but of upright heart and faith in the Lord, which offered to go back and take his abode there, and cut down the trees and burn the charcoal for his master. So he went, being but a poor lad, and poorly clad in leathern tunic and coarse serge hood. And Hilarion took with him an ox and an ass, to load with charcoal and drive down to Bethlehem to his master.

And the first night that Hilarion slept in that house, which was fallen to ruin, only a piece of roof remaining which he thatched with pine-branches, he heard voices singing in the air, as of children, both boys and maidens. But he closed his eyes and repeated a Paternoster and turned over and slept. And again, another night he heard voices, and knew the house to be haunted, and trembled. But being clean of heart he said two Aves and went to sleep. And once more did he hear the voices, and they were passing sweet, and with them came a fragrance as of crushed herbs, and many kinds of flowers, and frankincense, and orris-root; and Hilarion shook, for he feared lest it be the heathen gods, Mercury, or Macomet, or Apollinia. But he said his prayer and slept.

But at length, one night, as Hilarion

heard those songs as usual, he opened his eyes. And behold! the place was light, and a great staircase of light, like golden cobwebs, stretched up to heaven, and there were angels going about in numbers, coming and going, with locks like honeycomb, and dresses pink and green, and sky blue and white, thickly embroidered with purest pearls, and wings as of butterflies and peacock's tails, with glories of solid gold about their head. And they went to and fro, carrying garlands and strewing flowers, so that, although midwinter, it was like a garden in June, so sweet of roses, and lilies, and gillieflowers. And the angels sang; and when they had finished their work, they said, "It is well," and departed, holding hands and flying into the sky above the fir trees.

And Hilarion wondered greatly, and said five Paters and six Aves.

And the next day, as he was cutting a fir tree in the wood, there met him among the rocks a man old, venerable, with a long gray beard and a solemn air. And he was clad in crimson, and under his arm he carried written books and a scourge. And Hilarion said: "Who art thou, for this forest is haunted by spirits, and I would know whether thou be of them or of men."

And the ancient made answer: "My name is Hieronymus. I am a wise man and a king. I have spent all my days learning the secrets of things. I know how the trees grow and waters run, and where treasure lies; and I can teach thee what the stars sing, and in what manner the ruby and emerald are smelted in the bowels of the earth; and I can chain the winds and stop the sun, for I am wise above all men. But I seek one wiser than myself, and go through the woods in search of him, my master."

And Hilarion said: "Tarry thou here and thou shalt see, if I mistake not, him whom thou seekest."

So the old man, whose name was Hieronymus, tarried in the forest and built himself a hut of stones.

And the day after that, as Hilarion went forth to catch fish in the river, he met on the bank a lady, beautiful beyond compare, the which for all clothing wore only her own hair, golden and exceeding long.

And Hilarion asked:

"Who art thou, for this forest is haunted by spirits, and I would know whether

thou art one of such, and of evil intent, as the demon Venus, or a woman like the mother who bare me." And the lady answered :

"My name is Magdalen. I am a princess and a courtesan, and the fairest woman that ever be. All day the princes and kings of the earth have brought gifts to my house, and hung wreaths on my roof, and strewed flowers in my yard ; and the poets all day have sung to their lutes, and all have lain groaning at my gates at night ; for I am beautiful beyond all creatures. But I seek one more beautiful than myself, and go searching my master by the lakes and the rivers."

And Hilarion made answer.

"Tarry thou here, and thou shalt see, if I mistake not, him whom thou seekest."

And the lady, whose name was Magdalen, tarried by the river and built herself a cabin of reeds and leaves. And that night was the longest and coldest of the winter. And Hilarion made for himself a bed of fern and hay in the stable of the ox and the ass ; and lay close to them for warmth. And lo ! in the middle of the night, the ass brayed and the ox bellowed, and Hilarion started up. And he saw the heavens open with a great brightness as of beaten and fretted gold, and angels coming and going, and holding each other by the hand, and wreathed in roses, and singing "Gloria in Excelsis Deo, et in terra pax hominibus bonæ voluntatis." And Hilarion wondered and said ten Paters and ten Aves.

And that day, toward noon, there came

through the wood one bearing a staff, and leading a mule, on which was seated a woman, that was near unto her hour and moaning piteously. And they were poor folk and travel-stained.

And the man said to Hilarion : "My name is Joseph. I am a carpenter from the city of Nazareth, and my wife is called Mary, and she is in travail. Suffer thou us to rest, and my wife to lie on the straw of the stable."

And Hilarion said : "You are welcome. Benedictus qui venit in nomine domini," and Hilarion laid down more fern and hay, and gave provender to the mule. And the woman's hour came, and she was delivered of a male child. And Hilarion took it and laid it in the manger. And he went forth into the woods and found the ancient wizard Hieronymus, and the lady Magdalen, and said :

"Come with me to the ruined house, for truly there is He whom you be seeking."

And they followed him to the ruined house where the fir-trees were cleared above the river ; and they saw the babe lying in the manger, and Hieronymus and Magdalen kneeled down, saying, "Surely this is He that is our Master, for He is wiser and more fair than either."

And the skies opened, and there came forth angels, such as Hilarion had seen, with glories of solid gold round their heads, and garlands of roses about their necks, and they took hands and danced, and sang, flying up : "Gloria in Excelsis Deo."

## II.

### THE THREE KINGS. A MEDLEY IN PROSE AND VERSE.

BY A. MARY F. ROBINSON (MADAME DARMESTETER).

THE snowflakes fluttered down outside the window as big as butterflies. Vera threw another log of oak upon the hearth. The dancing flames leaped up so brightly that the Mage opened again the volume on his knee and began to decipher from right to left its large outlandish characters. Stella still hovered by the window and watched the convent garden opposite, and the nuns, young and old, grotesquely hurrying to church, with their wide skirts

gathered almost to the knee, and a wheeling umbrella inadequately sheltering each holy head. Suddenly down the quiet street there rang a clatter of hoofs. Three cavalry officers, wrapped in their immense gray-blue snowy mantles, rode along by the white wall under the overhanging snow-laden branches of the convent garden.

"Look !" cried Stella, her eyes blazing (you know how she fires up at the least

little thing, so that her humdrum life is one round of wild excitement). "Did you ever see anything half so fine? Oh, if I were a painter!—Cazin, for instance, or even Merson—that is how I should paint the Three Kings!"

"The Three Kings," cried Vera, "what next?"

"You think too much of their caps and mantles," said Stella. "To my mind, to paint them in any strange disguise is to outrage all the values of feeling. They must look no stranger to us than they looked to the good people of Bethlehem; picturesque and different, but not *impossible*. Why should you put a gulf of centuries between the spectators and the personages of a picture, when you wish to convey, not an archaeological statement, but a moment of emotion? The Three Kings never were, and never ought to be, merely the æsthetic rococo creatures of a vision. I should have more sympathy with a man who painted them from the Chinese Ambassadors in Portland Place! That, at any rate, would convey some meaning to the little boys in Goodge Street."

"I scarce know which to admire the more," laughed the Mage, "your choice of a public or your view of your subject."

"As for me," continued Stella, loftily, "I should paint nothing extraordinary in their appearance. No leopards, no gold chains, no crowns or plumes or roses. I should just paint a quiet, white, Oriental-looking street—a lonely street, evidently a lost corner, a suburb, where the rents are low, and there are trees over the garden walls, the sort of street you might find anywhere any time, but dignified by the whiteness and the moonlit dusk. There I would place three indistinct muffled figures, riding swiftly. You should not see a jewel on their coats, but you should notice in their faces a look of exaltation, submission, ecstasy. You should guess that they are riding to a predestined end, and you should feel that they rode in a mysterious manner to fulfil the will of God."

"So easy!" murmured Vera, who paints.

"And you should see," continued Stella, solemnly—" (chiefly in the rapt expression of their upturned faces, but also faintly indicated for you on the horizon),

—you should see that they followed the guiding of a star."

"That is charming, Stella dear," said Vera, smiling. "But would it not be a little like the landscape you wanted me to paint at Lapworth, you know, that morning, with the willow-herb and mint smelling sweet by the river, and the wind awaying the boughs continually from side to side, and the bells ringing for church, and the indescribable feeling of peace and Sunday morning?"

Stella has heard a good deal of that famous landscape. She gave a desperate little sigh, and continued looking at her imaginary picture.

"How tired you look, Stella!" cried the Mage. "Do come and sit down by the fire in peace, you excitable child!"

"What do you think of the Mages, Mage?" said Stella, drumming on the window-pane, and looking as though scenes of unimaginable interest were passing across the way in the quiet garden of the nuns. "Who, after all, *were* the Mages?"

"Come and sit down by the fire and I will tell you, not perhaps who they were, but what the people of Bethlehem thought of them."

"Who they were! What they thought?" cried Stella, eagerly. "Oh, do you mean to say there were really any such people?"

"Stella!" cried Vera, in a warning voice.

The Mage laughed. "Vera says nothing and believes. Stella waxes enthusiastic over her Three Kings, and hasn't the faintest belief in their existence. Well, Stella, once upon a time there were in the East three kings."

"Their names," said Vera, dreamily, "were Melchior, Caspar, and Balthazar."

"Balthazar, Melchior, and Caspar," corrected Stella. "Don't you remember we had three rabbits called after them? And they were kings of Tarsis, Sheba, and Nubia; and the youngest was black."

"And the first was aged sixty, the second forty, and the youngest twenty years of age," concluded the Mage.

"Oh really, Mage. Come, finish!" cried Stella. "See, I will sit on the fender-stool, and you shall tell us a story."

The Mage hummed, frowned a little, and began: "A long time ago, more than thirty years before the Christ was born,

there was no king in Judæa. Hircan, who had been king, had submitted to the Romans, and reigned as Ethnarch on a diminished throne. The people hated him, although he was a Maccabee, of the race elect, the royal blood; for he had called the Romans into Jerusalem. Moreover, his chief minister was an Edomite: a man whose forefathers had been the idolatrous heathen. The young son of this man, Herod, was already more mighty than any true-born Jew.

"So the hearts of the people were turned from Hircan and went out toward a younger Maccabee, Aristogonus, nephew of the Ethnarch, who laid claim to be king of the Jews. Escaped from a prison in Rome, Aristogonus was the enemy of the Romans. He journeyed from court to court of the Syrian princes, laying plan after plan for a national rising. So that in their dreams the Jewish people, disenchanted with Hircan, impatient of the Roman rule, took for their Deliverer their young prince in exile, restlessly wandering under Lebanon with Ptolemy, king of Chalchide, or watching with king Marion the ships that sail from Tyr.

"There was one man whose duty it was to guard against the ambition of Aristogonus—Mark Antony, the master of the East. But in the winter he remembered Cleopatra, and leaving Palestine but ill defended, he hurried to the Nile. A great throb of hope thrilled the discontented courts of Syria.

"They sent to the Parthian king of Persia and called him into Palestine. The king's son, Pacorus, came in answer at the head of an army. Beside him rode the Mages (three or more), robed in white, girdled with the sacred girdle, and in their hands the sacerdotal wand. Behind them streamed an endless host: Parthian knights armed *cap-à-pie* in close-fitting chain armor, cloaked with purple, clasped with pearl, plumes in their head-dress, and, sewn into their garments, large, rudely cut, and moony gems. Gold and silver caparisoned their horses. Such was the army that rode to save the Jews. Some went by Galilee, others made for Jerusalem: all the roads of Palestine became familiar with the kings and wise men out of the East, riding to bring their gifts of frankincense and gold and myrrh to the Temple of Jerusalem, riding to set upon his throne the unacknowledged King of

the Jews. All gave way before them, and for a year the Parthians and their Mages remained with Aristogonus in Jerusalem. Pacorus, a gentle and a noble prince, administered the country with a mercy that contrasted with the Roman rule. But meanwhile Herod had escaped. He had fled to Rome. He returned with a legion. Two years of sieges and vain heroic battles concluded the brief triumph of the Jews. Their Maccabee was put to death, and, in reward for his services, the Romans bestowed on Herod the Edomite the crown of Ethnarch of the Jews."

"And where do the Three Kings come in?" asked Vera, sceptically. "It seems to me they were four or five or six, with a Triumvir and several Ethnarcha!"

"And they came thirty years too soon," murmured Stella; "but perhaps that's just it."

The Mage smiled.

"Yes, that's it, Stella. And, Vera, forgive me. I never meant you to understand your kings should be exactly three. Three is the natural number of legend and tradition—the number the people would instinctively fix upon when they began to turn their fading memories into song or story. When Christ was born—I do not mean when Jesus was born in Bethlehem, but when in all the country side the news began to spread that there was among them a miraculous youth who was the Messiah come to save the Jews—when Christ was born *ideally* in the hearts of his countrymen, still in every village there remained old men and women who had seen in their childhood the shining host of Pacorus. The long reign of Herod, like a black tract, divided that deliverer from this. And when a new thrill of hope stirred in Judæa, and the friends of John and the family of Mary began to prophesy of the great deeds that should be wrought by this divine and long-expected King of the Jews—the old people would remember the great event of their youth, the hopes they too had dreamed, when the Army of Angels\* came riding from the East, bringing gifts to the true God and hope to Palestine.

"It was easy for the people to do as the people always do—to shorten, to impersonate—until the army of the Persian

\* "For the army of the Parthians was an Army of Angels," wrote the Pehlvi Jewish chroniclers in the third century after Christ.

prince became Three Kings—three Magi rather—travelling from their Eastern country to salute the Messiah. But you shake your head, Vera, and you have that obstinate little malicious smile which, when we used to play at hide-and-seek, meant that the seeker was not ‘warm.’ No, you don’t think I am ‘warm,’ and very likely you are right! But I fancy none the less that Stella understands what I mean by all this wandering.”

“Of course Stella understands you!” cried Vera, earnestly. “She is already of your party, your new-fangled faction who cannot let the truth alone, but must ever be rearranging it, explaining it away, when it was so divine and simple before you touched it! Stella wants to make it pretty with the fashionable prettiness of Merson or Cazin. You, I suppose, want to make it true (or make it false, which?) by your historical evidence. I wonder you don’t send a report upon it to some learned society! You would dare to believe in it then. You can’t see, poor friends, that it is beautiful and true because it is the word of God; more beautiful, more true than anything you can possibly invent. You make me inclined to laugh with your stories of Parthians and Maccabees! Do you suppose I want an excuse to believe in the Bible? If God says three wise men came from the East, that is clear enough. So it happened, and there is no need of any explanation.”

“You are begging the whole question of Revelation,” said Stella, quickly.

“I am sure I am very sorry if I hurt your feelings, Vera,” the Mage began, with some timidity.

“Not in the least!” cried Vera, with shining eyes.

“But I can’t see how you can object to my theory,” he went on. “The firmest Christian may admit the element of poetry, of fancy, inseparable from any story that has lain long unwritten in the hands of Oriental populations, who transmute it unawares in the crucible of their imagination.”

“He would be a very scandalous Christian,” cried Vera, “who admitted anything of the sort! Once begin there and the end is infidelity. As for me, I pray you to lend me none of your admissions. I should never have spoken on this subject if you and Stella had not carried it so far that not to disagree with you is to appear

to share your views. But, once for all, I would like you both to know that I believe just this:

“*When Jesus was born in Bethlehem of Judea, in the days of Herod the king, behold there came wise men from the East to Jerusalem;*

“*Saying, Where is he that is born King of the Jews? For we have seen his star and are come to worship him.*

“*And lo! the star which they saw in the East went before them, till it came and stood over where the young child was.*

“*And when they were come into the house, they saw the young child with Mary his mother, and fell down and worshipped him, and when they had opened their treasures, they presented him with gifts; gold, and frankincense, and myrrh.*

“That is what I believe, and no more than that; and I do not see that any of your fancies are one hundredth part as moving as that simple narration. The three wise men—wise with the lore of the East—kings, perhaps, in their own country, though I do not remember any verse that says so, who have read in their stars of a great King’s nativity, and have come so far to find him. But in the king’s palace he is not, nor in the capital; and as they are returning homeward, over the stable in a lonely village they see the star they noticed in the East, and they rejoice thereat exceedingly. And, never doubting, they enter the stable. Within they find some quite poor, common people, travel-stained and shabby, sleeping among the cattle: an old carpenter, his young wife, and a new-born child. And they do not hesitate for a moment; they know that *this* is the King, this babe in a manger; so, undoing their treasure, they present their royal gifts to him, and fall and worship before him. Have you ever realized what fantastic Don Quixotes these wise men must have appeared to the other villagers of Bethlehem? Or the danger in which they put their lives, so that they dared not go home through Jerusalem, out of fear of King Herod, but had to seek their country by another way? *They*, at any rate, did not wait for historical evidence! *They* did not wish their Saviour dressed up in any picturesque or striking fashion! But, disdaining everything that experience could teach, and the common sense of the multitude, and the danger and apparent folly of

their conduct, they worshipped the Heavenly King as they found him, asked no questions, suggested no alterations, and attempted no explanation."

Vera stopped suddenly, with an effort of self-control. It was evident that she had in her heart a great deal more to say.

The Mage looked at her for a moment with affectionate admiration.

"You do not suppose that I should presume to answer you? In fact, there is no answer. I seek the truth; you are sure that you have found it. And, after all, what is truth save a thing we appear to have ascertained? The revelation of the Nativity is true to you; if it be not true to me, I will not say that my disbelief is evidence of its untruth."

"You will not say so," said Vera, softly, coldly; "no, you would not hurt my feelings."

"And you would do wrong to be hurt," continued the Mage, "since belief or unbelief is not an act of will. It is good to believe; it is a source of courage, endurance, action, love. And the sentiment remains eternally the same, but the object changes, or appears to change. Prometheus and Socrates, Christ and Bouddha, Galileo, the Smithfield martyrs and Giordano Bruno suffered for different truths. But their force and example are the same—they suffered for the Truth! They believed! If by my dryasdust, practical, and earthly ways I can discover for myself and mine (who no longer believe with you) a truth in which to believe, for which to love and do, and suffer—you should not look upon me as an antagonist, but as an ally; we go the same road, although we halt at different stations. We are leagued against the inertia, the deadness, the indifference of the Spirit who denies."

"That is all very fine," observed Vera, "very fine and new and cosmopolitan, no doubt; but how can I consider as an ally the person who in my eyes becomes an idolater so soon as he ceases to be an atheist? No, I can look upon him with love and pity, as a blind man whose eyes Christ will open in his own good time—and perhaps one instant sooner through my prayers!—I can believe him unconscious, almost innocent, enveloped for a span in a mist of invincible ignorance. But if you expect me to abet him in his delusion, you only prove yourself incapable of seeing things from my point of view. But it is useless

discussing! We are *not* going the same road. We are going different roads from the same point. We can never meet."

There was an instant's silence in the room.

"And Stella?" said the Mage: "Stella says nothing?"

In fact, Stella—who is always very silent when she is not very excited—Stella had fallen into a brown study, and appeared to hear neither of them. She was sitting on the little stool, her cheek on one hand, looking into the fire with a far-away gaze, while with the fingers of her left hand she drummed out some monotonous, inaudible rhythm upon the brass rail of the fender.

"Oh, Stella is like Gallio!" laughed Vera, a little bitterly.

"No," said Stella, simply, "I was only making a ballad."

"Let us have it—your ballad!" cried the Mage with an accent of relief.

"If you like," said Stella; "but it's very rough—not quite finished. You must consider that I am a Rhapsodist, come in out of the snow, a little hoarse, and that you have nothing better to do than to sit in the wide draughty chimney-corner, wrapped in your mantles, and listen to me telling stories in the firelit dusk."

"That is rather a classic beginning," said the Mage.

"The ballad is not classic at all," answered Stella.

"If you are going to tell it, please begin at once," cried Vera, who did not care for poetry, but liked anything better than discussion.

"Very well," said Stella; "it's called, of course,

#### THE THREE KINGS.

Three kings went riding from the East

Through fine weather and wet;

"And whither shall we ride," they said,

"Where we ha' not ridden yet?"

"Any whither shall we ride," they said,

"To find the hidden thing

That turns the course of all our stars

And all our auguring?"

They were the Wise Men of the East,

And none so wise as they;

"Alas!" the King of Persia cried,

"And must ye ride away?"

"Yet since ye go a-riding, sirs,

I pray ye, ride for me,

And carry me my golden gifts

To the King o' Galilee.

"Go riding into Palestine,  
A long ride and a fair!"  
"Tis well!" the Mages answered him,  
"As well as anywhere!"

They rode by day, they rode by night,  
The stars came out on high—  
"And oh!" said King Balthazar,  
As he gazed into the sky,

"We ride by day, we ride by night,  
To a King in Galilee,  
We leave a king in Persia,  
And kings no less are we.

"Yet often in the deep blue night,  
When stars burn far and dim,  
I wish I knew a greater King  
To fall and worship him.

"A King who should not care to reign,  
But wonderful and fair;  
A king—a king that were a Star  
Aloft in miles of air!"

"A star is good," said Melchior.  
"A high, unworldly thing;  
But I would choose a soul alive  
To be my Lord and King.

"Not Herod, nay, nor Cyrus, nay,  
Not any king at all;  
For I would choose a newborn child  
Laid in a manger-stall."

"Tis well," the black King Caspar cried,  
"For mighty men are ye;  
But no such humble King were meet  
For my simplicity.

"A star is small and very far,  
A babe's a simple thing;  
The very Son of God himself  
Shall be my Lord and King!"

Then smiled the King Balthazar,  
"A good youth!" Melchior cried;  
And young and old, without a word,  
Along the hills they ride.

Till lo! among the western skies  
There grows a shining thing—  
"The star! Behold the star," they shout;  
"Behold Balthazar's King!"

And lo! within the western skies  
The star begins to flit;  
The three kings spur their horses on  
And follow after it.

And when they reach the king's palace  
They cry, "Behold the place!"  
But, like a shining bird, the star  
Flits on in heaven apace.

Oh they rode on and on they rode,  
Till they reached a lonely wold,  
Where shepherds keep their flocks by night,  
And the night was chill and cold.

Oh they rode on and on they rode,  
Till they reach a little town,  
And there the star in heaven stands still  
Above a stable brown.

The town is hardly a village,  
The stable's old and poor,  
But there the star in heaven stands still  
Above the stable door.

And through the open door, the straw  
And the tired beasts they see;  
And the Babe, laid in a manger,  
That sleepeth peacefully.

"All hail, the King of Melchior!"  
The three wise men begin;  
King Melchior swings from off his horse,  
And he would have entered in.

But why do the horses whinny and neigh?  
And what thing fills the night  
With wheeling spires of angels,  
And streams of heavenly light?

Above the stable roof they turn  
And hover in a ring,  
And "Glory be to God on high  
And peace on earth" they sing.

King Melchior kneels upon the grass  
And falls a-praying there;  
Balthazar lets the bridle drop  
And gazes in the air.

But Caspar gives a happy shout  
And hastens to the stall,  
"Now hail!" he cries, "thou Son of God,  
And Saviour of us all."

The chanting voice stopped. Stella  
jumped up and ran to look out of the  
window.

After a moment, Vera said, with some  
hesitation—

"It is very pretty, dear; but you know  
my opinion: I think only really religious  
people should write about religious sub-  
jects."

"Then we shall have to decide who are  
religious people," observed the Mage.

"Oh, now it is all coming over again!"  
cried Stella. "Do you want to know my  
opinion, Vera? I think we have talked  
enough about the Mages for one afternoon;  
and I think if we talk till doomsday we  
shall never persuade any one of us that  
the other is right. And I think if we  
want to know what the Mages were really  
like, we had best go round, now the snow  
is over, to the little church at the corner  
and see them in the *crèche*. Last year at  
Bonlogne I saw such a funny little *crèche*  
in the Church of the Fishermen at Saint  
Pierre; the Three Kings were dressed in

pilot-cloth and glazed tarpaulin. They were little dolls, two feet high; and I suppose it was all very ridiculous. But somehow they brought home to me the reality and poetry of the story much bet-

ter than all our conversation. And I think that to look at any sort of representation of a thing is better than all the discussion in the world: *voilà mon opinion, et je la partage!*"—*Contemporary Review*.

### THE VENOMOUS SNAKES OF INDIA.

BY SIR JOSEPH FAYRER.

In a previous article an account was given of the carnivora and other wild beasts which are destructive to life in British India; of the mortality caused by them in those provinces which have furnished statistical records of the death-rates, of the rewards paid by Government for the destruction of the noxious creatures, and of the numbers destroyed, with a brief notice of the measures in force for abating the evil.

It was shown that the average loss of life caused by wild animals and venomous snakes combined has for eight years been at the rate of 22,620 human beings and 53,277 head of cattle annually, and that it has continued at about the same rate, with slight fluctuations, up to the present date, notwithstanding such measures as may have been resorted to for its prevention. It was also shown that of these deaths those of 2,740 human beings and 51,180 head of cattle and other domestic animals were due to wild animals alone, while the much larger number of 19,880 deaths of human beings, and the smaller of 2,100 of cattle were ascribed to venomous snakes of different kinds. The smallest numbers killed by wild beasts and snakes combined, recorded in the eight years cited, were in 1881, when 21,427 human beings and 43,669 cattle were killed; the largest figures were in 1886, when 24,841 men, and in 1887, when 63,737 cattle were killed.

In this paper I propose to describe the reptiles which cause these deaths, to give some account of the circumstances under which they exert their lethal power, to notice the measures in operation for preventing the evil, and to make a brief reference to the nature and physiological action of the virus which is so fatal.

The provinces referred to represent, roughly, about five-eighths of the peninsula, and the population about 199,000,-

000, or seven-ninths of a total population of 256,000,000; both are the same as those referred to in the former paper. The thirteen groups of native states forming Feudatory India, with the French and Portuguese possessions, having a population of 57,000,000, are excluded from the above calculations.

In describing the venomous snakes of India I shall dwell at any length on those only which are most destructive to life, e.g. the *Naja* or Cobra, the *Ophiophagus* or *Hamadryad*, the *Bungarus* or *Krait*, the *Daboia* or *Russell's viper*, and the *Echis carinata* or *Kuppur*. The crotaline snakes, though all poisonous, are comparatively innocuous, as far as human life is concerned. Some notice will also be taken of the hydrophidæ or sea snakes which, though exceedingly poisonous, are not very destructive to human life.

I regret that I am unable to assign to each species its individual share in the death rate, as no reliable returns of this particular form of detail are available. The deaths, whatever their numbers may be, are recorded under the general head of "poisonous snakes."

India is richly supplied with both venomous and innocuous snakes; with the latter we are not here concerned.

The order Ophidia has two principal subdivisions, the colubriiform and the viperiform. The first is divided into the venomous and innocuous. The second or viperiform are all venomous. Both the colubrine and viperiform are numerous represented in India; the colubriiform by five genera of elapidæ and four of hydrophidæ, the viperiform by two genera of viperidæ and four of crotalidæ, making a total of fifteen poisonous genera, comprising a large number of species and varieties. But large as the number is, it is small compared with the innocent genera and species contained in about seventeen fami-

lies of innocent colubri-form snakes inhabiting the same country.

Snakes are pretty generally distributed over the globe wherever climate and other physical conditions are favorable to their existence, but tropical countries are most richly supplied, and in the hottest regions the most venomous are found. In our own islands, the common adder is the only venomous snake, and its power is feeble compared with that of the snakes of India, the West Indies, Tropical America, Africa, and Australia, where the largest and most deadly forms are found in great variety. The most widely distributed venomous snakes are the viperiform; America and Africa abound in them, the crotalidæ being most numerous in the former, the true vipers in the latter, while in Asia the poisonous colubrine snakes are most numerous and are represented by the *Najas*, *Bungarus*, *Callophis*, and the *hydrophidæ*. The true vipers, on the other hand, are represented by *Daboia* and *Echis*, while the crotalidæ or pit vipers are represented by *Trimeresurus*, *Hypnale*, *Halys*; Australia has its peculiar forms of both colubri-form and viperiform genera.

The general characters of Ophidia are well known, and therefore need only a few remarks on the distinctive characters of the venomous, as contrasted with the innocent forms, with a brief notice of the apparatus by which the virus is secreted, and of the fangs by which it is inoculated.

Snakes are oviparous or ovoviviparous; the colubrine snakes for the most part belong to the first class,—the cobra, for example, lays eggs; there are exceptions, however, such as *hydrophidæ* and *homolopsideæ*, which bring forth their young alive. The viperine—*e.g.* the *daboia*, the adder, the rattle-snake—are viviparous. There are exceptions, as some *Trimeresuri* are oviparous, it is said, but there is no great physiological distinction after all, the question being whether the eggs are hatched before or after leaving the oviduct. The progeny is numerous; the cobra lays twenty to thirty white, leathery eggs, which are hatched in some warm place by the natural heat. The viper is equally prolific. Some oviparous snakes are said to incubate; the cobra probably watches its eggs; the python is said to have been observed to coil itself round its eggs until hatched. Young vipers emerge from the oviduct alive, the process being expedited

by the mother exposing herself in a warm, sunny place. The female of all snakes is said to be larger than the male. There may be differences in color and slight variations in form, but no other prominent external characters distinguish the sexes.

Snakes hibernate in cold climates; returning warmth rouses them into activity. I have seen a python in the north-west of India, quite torpid in the early morning in the cold weather, roused to activity by the heat of the sun's rays. Snakes are carnivorous, and generally eat living creatures, but some will swallow eggs—the cobra sometimes robs the hen-roost—insects, mollusks, and even, it is said, vegetable matter; they prefer living prey, and some are cannibals—the *ophiophagus* and *callophis*, especially, live on snakes. In captivity they will, it is said, drink milk; needless to add that the bucolic tradition of robbing the cow is a myth.

Snakes differ in their habits and modes of life, and are grouped accordingly. Tree and grass snakes live in the trees, bushes, and grass, and are often colored like the vegetation they frequent. When slender and active they are called whip snakes; innocent and poisonous forms are found among them. Ground snakes are found in all three sub-orders; they generally live above ground, and the great proportion of snakes, whether innocent or venomous, belong to this group.

Burrowing snakes live much underground, have a rigid, cylindrical body, short tail, narrow mouth, small teeth, and are all innocent.

There are fresh and salt-water snakes. The salt-water snakes are peculiarly adapted for an aquatic life, and are all venomous; the fresh-water snakes have not the same characters as the *hydrophidæ*, or salt-water snakes, and are innocent—a curious fact! The *hydrophidæ* are viviparous.

It may be well here to say a few words on the structure of the jaws, teeth, and poison apparatus of the venomous snakes. The cranium is made up of a number of bones modified in accordance with the general structure and habits of the creature. It is only necessary to refer to these as far as concerns the mode in which the prey is seized and swallowed, and the poisonous wound inflicted. Deglutition is effected in a peculiar way: the prey being seized, the mouth gapes laterally and vertically;

each side of the jaws, having independent motion, is called separately into action, and the object grasped is slowly but surely drawn in; the sharp and recurved teeth hold it firmly as each side of the jaw alternately advances or relaxes its grasp; the prey is thus gradually but inevitably engulfed, the mouth and passages distending to an extraordinary degree. This is effected by the method in which the mandibles, maxillæ, and tympanic bones are articulated; the latter are long and slender, loosely articulated with the mastoid bones of the skull. At their distal extremities they articulate in a similar manner with the mandibles; these, again, are united in front by an elastic ligament. This allows of great stretching in all directions, enabling the snake to swallow an object much larger than itself in diameter.

The mandibles are closely set with sharp recurved teeth; the upper jaws, composed of the maxillary pterygoid and palatine bones, have also teeth. These with the premaxillary bones make up the maxillary arch.

The maxillary bones are characteristic in the venomous snakes, being much shorter and provided with fewer teeth than in the innocent snakes. In the latter they are elongated slips of bone set with small recurved teeth. In the poisonous colubrine snakes they are less elongated and have a fixed, large, tubular poison fang, several loose reserve fangs, and one, two, or more fixed smaller teeth which are not tubular and not directly connected with the poison apparatus. In the viperidæ the maxillary bone is a short triangular movable wedge furnished with one long tubular poison fang lying hidden in the mucous sheath. The movements of the poison fang as seen in the viperidæ are due to the rotation of the maxillary bone on its articulation with the skull, not to the mobility of the fang itself, the active poison fang in all snakes being firmly fixed in the maxillary bone. This mobility of the maxillary bone is very great in vipers, e.g. *Daboia*, *Crotalus* and *Peliæ*, while it is very slight in the poisonous colubrines.

The mechanism by which the fangs of a viper are reclined or erected is most curious and beautiful. When erected, the maxillary bone, into which the fang is inserted, is pushed forward by the external pterygoid bone, which is drawn forward

by the action of the prespheno-ptyergoid muscle. The muscular arrangement for opening and closing the mouth and at the same time compressing the poison gland, thereby injecting the venom through the tubular fang, is beautifully adapted to the purpose to be fulfilled.

It must suffice to mention the principal muscles. The temporals, masseters, and pterygoids are mainly concerned in closing the jaws and in compressing the poison gland; the prespheno-ptyergoid erects the fang. There are other muscles which move the jaws, or help to steady the erect fang when in the act of biting, but these need not be described. The poison glands are situated between the orbit and the tympanic bone. They are oval bodies, composed of lobes and lobules, which, having secreted the virus from the blood, which is abundantly supplied to the gland, force it through a duct which leads to and opens by a papilla into a capsule of mucous membrane, whence it finds its way into a triangular opening at the base of the fang, with which the papillary end of the duct is brought into close apposition, and thence it finds its way along a canal (to be described presently) into the wound. The poison glands are of various forms and sizes. In some snakes, as *Callophis*, they are much elongated; in the cobra they are of the size and something of the shape of an almond. They are enclosed and fixed *in situ* by a fibrous capsule which is connected with a tendon, and are covered by the muscular fibres which compress them when the mouth is closed. The virus is a transparent, slightly viscid fluid, faintly acid in reaction, having something of the appearance of glycerine, of a faint yellow or straw color—in the ophiophagus of a yellow color—when dried, it forms a semi-crystalline substance, like gum Arabic. It is secreted in considerable quantities; and if a fresh, vigorous snake be made to bite a leaf stretched across a teaspoon—or, as the natives of India do it, with a mussel-shell—several drops may be obtained. It is exhausted when the snake has bitten frequently, but is rapidly reformed; in the interval the reptile is comparatively harmless, but soon becomes dangerous again. It has been shown that a vigorous cobra can kill several creatures before its bite becomes impotent, but the immunity is of short duration, the virus being rapidly resecreted.

Removal of the fangs has the effect of rendering the snake temporarily harmless ; but, as the reserve fangs (unless, indeed, they have all been removed) replace those which have been taken away, the snake soon becomes dangerous again, as has been proved by more than one fatal accident to the snake-charmers and others.

Some animals, especially the pig and the mongoose, are supposed to have immunity from snake-bite : fat sometimes protects the former, and the latter is so wiry and active that he frequently escapes with only a scratch ; but, if either of them be fairly bitten in a vascular part, he succumbs like any other animal.

The chemistry of snake-poison has been made the subject of inquiry by Fontana, Prince L. Bonaparte, Armatrong, Gautier, and others, and recently by Drs. Weir Mitchell, and Reichert of the United States, the results of whose investigations were published in 1886. Gautier thought he had discovered a ptomaine in the venom of cobra, but they have been quite unable to verify this statement. They maintain that there are three distinct bodies in the venom : one is apparently harmless, while of the other two, which are proteids, one belongs to the globulins, the other to the peptones. The globulins, again, are of different kinds, and the investigators are of opinion that explanation of the difference of the physiological effects produced by different species of snakes may be afforded by the proportion of globulins to peptones, and of the various kinds of globulin to one another. For instance, the poison of *Naja* does not destroy the coagulability of the blood ; it contains only 1.75 per cent. of globulins, peptone being the material which represents the poisoning capacity ; the viperine poisons produce complete fluidity, and the venom of *crotalus* contains 24.6 per cent. of globulins. Other experiments with the globulin and peptone parts of the venom have given like results.

Heat has very little effect on the toxicity of cobra poison, unless its application be very prolonged ; but in other species heating the venom beyond a certain point, varying for different venoms, lessens its poisonous power.

From other experiments of Drs. Weir Mitchell, Reichert, and others it appears that ferric chloride, bromine, iodine, and other reagents destroy crotaline venom ;

permanganate of potassium has great power to destroy cobra venom.

The activity of snake virus differs not only in character and intensity in different genera and species, but in the same individual under varying conditions of temperature, climate, health, and state of vigor or exhaustion. It is a most virulent poison, and may neither be sucked from a bite nor swallowed with impunity. It acts most rapidly on warm-blooded, but is also deadly to cold-blooded, creatures, and to the lowest forms of invertebrate life. Strange to say, a snake cannot poison itself, or one of its own species, scarcely its own congeners, and only slightly any other genus of venomous snake ; but it kills innocent snakes quickly.

Snake-poison kills by extinguishing in some way the source of nerve energy. It is also a blood poison and irritant, and causes great local disturbance as well as blood change. If it enter by a large vein, life may be destroyed in a few seconds. The chief effect is on the respiratory apparatus, and death occurs by asphyxia ; but general paralysis is also a result. These are the primary symptoms ; the secondary symptoms are such as result from blood-poisoning ; they manifest themselves in various ways, and have to be treated on ordinary medical principles.

The phenomena of poisoning vary according to the nature of the snake and the individual peculiarities of the creature injured, the chief difference being observed in viperine as contrasted with colubrine poison. The latter is a nerve poison of great deadliness, but as a blood poison its results are less marked. Viperine poison, on the other hand, is a more potent blood poison. Dr. Wall has made investigations on this subject and his conclusions verify those recorded in the *Thanatophidia*. Cobra poison produces general paralysis, but shows a preference for certain nerve centres ; respiration is quickly extinguished after paralysis shows itself, and death is attended with convulsions. Daboia (i.e. viperine) poison causes early convulsions, paralysis is general, and respiration is much more quickened than by cobra poison, but lasts longer. Daboia poison causes more local mischief, destroys to a far greater extent the coagulability of the blood, causes hæmorrhages, but less salivation, while in cobra poison

the latter is profuse, and the other symptoms are less prominent.

The local effects of the poison are partial paralysis of the bitten part, pain, swelling, hæmorrhage, and inflammation. The general symptoms are depression, faintness, cold sweats, nausea, vomiting, exhaustion, lethargy, unconsciousness.

Sixty-five cases of snake-bite are recorded in the *Thanatophidia of India*, and from them it appears that the most fatal periods are between two and three hours, and more than twenty-five per cent. of the total deaths take place between one and three hours after the infliction of the bite.

Out of the fifty four cases where the exact spot is stated, 94.54 per cent. of the wounds were in extremities; this is a matter of interest, as success depends on preventing access to the circulation and in the facility of removing the injured part.

Snake-poisoning in this country, by the adder, is of the viperine character; and though its immediate effects as a nerve poison are feeble, yet the effects on the blood and locally on the tissues may be productive of serious, if not dangerous, symptoms.

As to reputed antidotes, almost every known drug, and many other things besides, have been tried. Fontana, writing in 1782 on spirits of hartshorn, which was considered in his time to be an antidote, maintains that the few cases cited are not enough to establish it as a specific, and points out that remedies are frequently considered to be effectual because recovery has followed their application, while the fact that it is necessary to establish is that the patient would have died without the application. It is impossible to enumerate all the remedies that have been reported beneficial; but among those that have had the greatest repute may be mentioned arsenic, ammonia (given as an internal remedy and injected under the skin), alcohol, quinine, strychnine, acids, besides snake poison, snake bile, and the snake-stones so much relied on in India. These are said to attach themselves closely to the bitten part; the blood that oozes out is rapidly imbibed by the so-called stone; and when it drops off the bitten person is said to be out of danger. Faraday expressed his belief that these are pieces of charred bone which have been filled with blood and then charred again. There may be a fragment of truth in the supposition that they are

of use, because, in absorbing the blood, they must also absorb some of the poison, though so little that, in the case of a severe bite from a deadly snake, their efficacy must be a mere delusion.

The result of experience is that, so far, no physiological antidote to snake virus is known, and that, when the full effect on the respiratory centres is produced, remedies are of little, if any, avail; albeit, when the poison has entered in smaller quantities, medical treatment may be of service on general principles. In the treatment of snake-bite, the object is to prevent the entry of the poison into the system, and this may be done by applying a tight ligature above the injured part. The next step is, if possible, to remove or destroy the poison in the wound, by excision or by burning, and the application of potassium permanganate. The subsequent treatment is conducted on ordinary medical principles, of which further details would be out of place here.

A few words on the dentition of the snake.

In the innocuous snakes, the small, sharp, recurved teeth are arranged in four rows, an outer or maxillary and an inner or palatine. They are all tolerably equal in size, and not canalized. In the venomous snakes there are one, two, or three, seldom more, set in the movable maxillary bone; the anterior of these is the poison fang. In the viper it is the only fixed tooth attached to this bone, while in the poisonous colubrines—cobra to wit—there may be two or three smaller teeth implanted in the maxillary bone behind the fang, which is less movable than in vipers; and in all venomous snakes there are a number of reserve fangs of different sizes lying loose in the mucous capsule, which are ready to take the place of the principal fang, should it be lost.

The bite of a venomous snake may thus be distinguished from that of an innocent one by two punctures at a certain distance apart, and by the absence of smaller punctures. The fangs are shed at intervals, and, to supply the loss, the reserve teeth are provided. These lie in the capsule of mucous membrane which ensheathes the fang. These fangs are erroneously described as being perforated. The fact is, the tooth during development is folded on itself, so as to form a tube. In the vipers the fusion of the involuted edges is so

perfect as to form a perfect tube, with a triangular opening at the base and another near the apex of the fang. It is somewhat less perfect in the cobra, while in some sea snakes it remains an open groove. It is along this channel that the poison passes into the wound; and when the fang is deeply imbedded, the quantity of virus injected is considerable, and its effects are rapidly manifested. But if the snake merely strike, and wound or scratch without imbedding the fang, the severe symptoms of poisoning do not necessarily follow. Such is the explanation of some snake-bites from which no serious evil has resulted, or where the bitten person is supposed to have been preserved by an antidote. In other similar escapes, it may have been that the snake was exhausted by previous biting.

I must now give an account of the principal forms of venomous snakes found in India. The Elapidæ are subdivided into najadæ, or hooded snakes, and the elapidæ proper, which are not hooded. Najadæ have only two genera, *Naja* and *Ophiophagus*. Elapidæ have three Indian genera—*Bungarus*, *Xenurelaps*, *Callophis*.

The najadæ comprise the several varieties of cobra, which are all of one species, though differing considerably in external appearance.

The Cobra di Capello, *Naja tripudians*, has numerous synonyms in different parts of India. It is sometimes called the spectacled or hooded snake; some are marked with a figure like spectacles; others have a single ocellus on the hood; some have no mark. The former are called by the natives of Bengal "gokurrah," the latter "keautiah;" but they have other vernacular synonyms in different regions. A common general native term is *Kala Nag* or *Kala Samp*. There are many varieties, both as to pattern on the hood and general coloration, and they are considered by natives as being of different degrees of activity or deadliness; but the probability is that in these respects they are all much the same, any difference being due to temporary or individual causes.

The cobras are all hooded snakes—that is, the neck dilates into an oval disk, caused by the expansion of a certain number of elongated ribs. The body and tail are relatively of moderate length, seldom together exceeding five or six feet, more frequently three or four feet. The scales

are smooth and imbricated; there is no loreal shield, the nostrils are lateral, and the pupil of the eye is round. The head is short and not very distinctly separate from the neck; the fangs are of moderate size and but slightly movable; there are one or two small teeth behind them in the maxillary bone.

The cobra is a nocturnal snake—at least it is most active in the night, though often seen moving about in the day. It is oviparous; the eggs, eighteen to twenty-five in number, are obovate, about the size of those of a pigeon; the shell is white, tough, and leathery. They feed on small animals, birds' eggs, frogs, fish, even insects. They occasionally rob hen roosts and swallow the eggs whole, and prefer to take their food at dusk or during the night. They are said to drink much water; but it is certain that they will live weeks, even months, in captivity, without touching food or water. They go into water readily and swim well, but are essentially terrestrial snakes. They can climb, and occasionally ascend trees in search of food. Cobras are not infrequently found in the roofs of huts, holes in walls, old ruins, fowl-houses, and among stacks of wood, cellars, old brick-kilns, old masonry of brick and stone, or mud among the grass or low jungle; such are the common resorts, and during the rains or inundations they collect in such places of refuge, where they are frequently disturbed by men who, stepping on or unintentionally disturbing them, mostly at night, receive their death-wound.

The cobra sheds the epidermis with the outer layer of the cornea frequently, perhaps ten or twelve times a year; the fangs also are shed. The entire slough is often found marked by a single rent, through which the creature has emerged, brightly colored and glistening in its new epidermis. It aids the process of exfoliation by friction against some hard substance, such as the branches of a tree, a stone, or the like. The cast-off epidermis is often found in fragments.

The cobra is found all over Hindustan, up to a height of 8,000 feet in the Himalayas and other mountain ranges. Hodgson says he never saw it in the Nepal Valley, but I suspect it is there nevertheless. It is equally dreaded and fatal wherever met with; fortunately, it is not naturally aggressive, and seldom exercises its

dangerous power unless provoked or in self-defence, at which times its aspect is most alarming. Raising the anterior third or more of its body, and expanding its hood, with a loud hissing it draws back its head prepared to strike, and, when it does so, darts its head forward and either scratches, seizes, or imbeds its fangs in the object of attack. If the grasp be complete and the fangs of a vigorous and unexhausted snake be imbedded in the flesh, the most dangerous and often fatal effects result; but if the fangs only inflict a scratch, or if the snake be weak or exhausted, the same great danger is not incurred. When the bite is inflicted by a vigorous snake it soon proves fatal; if the poison enter a large vein and thence be quickly carried into the circulation, death is very rapid—indeed, almost immediate. Men have been known to perish from a cobra bite within half an hour. The largest and strongest as well as the smallest and weakest creatures succumb. Fortunately, all who are bitten do not die. In the first place, some human beings as well as lower animals have greater tolerance than others of this as of other poisons—a result, doubtless, of idiosyncrasy or varying degrees of nervous energy, which enables one to resist that to which another would succumb. Is it possible that a degree of tolerance might be acquired—as in the case of King Mithridates, who fed on poisons till they nourished him—by which perhaps immunity might be gained? I believe some investigations on this subject were made by Mr. Stradling, but I do not know with what result.

In the second place, a wound may have been inflicted and yet but little of the poison inoculated; or, in the third place, the snake may be weak or sickly, and not secreting the most virulent form of poison;\* or it may have been exhausted by recent biting, and thus have become temporarily deprived of the power of inflicting a deadly though still a poisoned wound. But when a cobra in the full possession of his powers bites, and injects the poison into man or beast, it is almost surely fatal, and all the remedies vaunted as infallible antidotes are futile. In bites that are less severe, medical aid may be of service, and life may be preserved by simple measures;

\* I had a cobra in Calcutta which was very vigorous and aggressive, but its virus seemed to be quite harmless.

but this is a very different matter from that of the so-called antidotes, all of which, after long, carefully conducted, and often repeated experiments, have been found utterly useless. How far remedies may be of avail has been briefly noticed.

Cobras are frequently exhibited by the so-called snake-charmers. Their graceful and imposing attitudes, with raised heads and distended necks, as they sway from side to side, watching the movements of their keeper, and frequently striking at him with their heads, and the ease with which they are handled and made to perform, make them favorites with this class and with the people generally. I may here remark that the cobra depicted in Hindu legends or old paintings is the *gokurrah*, or spectacled snake. Though generally, when kept for the purpose of exhibition, they are deprived of their fangs (which is done by roughly cutting them out with a coarse knife), the snake-catchers handle them fearlessly when armed. These men know the habits of the creature thoroughly, and are so well acquainted with the extent to which they can move and strike, that they take them up without fear, though with great caution, always grasping them tightly just below the head with one hand, and holding the tail with the other. To obviate any risk or needless trouble, they deprive them of their fangs by breaking or cutting them off at the roots, and thus rendering the snake temporarily harmless. They are aware that a new fang is soon produced, and to prevent this they sometimes destroy and remove the capsule and reserve fangs, thus rendering the snake permanently harmless. Neglect of these precautions has often resulted in dangerous accidents. The sole secret of these men lies in their dexterity and fearlessness, engendered by habit. Their *muntras* or charms, their antidotes, and the pipes or tubris with which they pretend to charm "never so wisely" are as devoid of all real efficacy or power over the snake as are the snake-stones, roots, and other nostrums over its poison. They know as well that their dexterity in avoiding the snake's fangs is their real security against being bitten, as that, if they are bitten, the only way of escaping death is at once to prevent the entry of the poison into the circulation by placing a ligature tightly round the trunk above the bitten part, and the application of the knife, hot

iron, or live coal to destroy it in the wound.

The snake-charmers, so called, prefer the cobra, but also occasionally exhibit the ophiophagus—which, like the cobra, raises the anterior part of its body and dilates the hood when excited—the bungarus, the daboia, and also some of the innocent snakes, such as chrysopelea, passerita, p'yas, and erix, which are remarkable for the beauty of their colors and activity or their peculiarity of form. These exhibitions are always accompanied by the music of the tubri, or pipe—the cobras raising their heads and moving slowly and gracefully from side to side, following the movements of the snake man. These movements, it is to be observed, are confined to the elapidae. The cobra is an object of veneration and superstitious awe to the Hindoos, in whose mythology it takes a prominent place. In a religion that deprecates the wrath of a cruel and relentless power by propitiating the deity in whom that power is vested, it is natural that the type of evil, as represented in this reptile, should be regarded with peculiar deference. Many Hindoos object to destroy the cobra if they find it in houses, as sometimes happens; when one has taken up its abode in a hole in the wall, it is fed, protected, and conciliated, as to provoke or injure it were to invoke misfortune on the house and family. Should fear, or perhaps the death of some inmate, prove stronger than superstition, it may be caught, tenderly handled, and deported in an earthen jar to some field, where it is released and allowed to escape. But this feeling, happily, is not universal, and the cobra has many enemies, which limit its increase. Besides by its natural foes, such as the mongoose (*Herpestes*), pigs, rapacious birds, and other creatures, numbers are destroyed by low-caste people for the sake of reward. But still the loss of human life from their bites is very great, and calls for more effective measures by which it may be mitigated.

The *Ophiophagus elaps* (Hamadryad, Sunkerechor) is one of the largest venomous snakes. It attains a length of twelve to fourteen feet, is very powerful and active, and is said to be aggressive; it is hooded like the cobra, and resembles it in general configuration and character. The color varies according to age and locality; the adult is some shade of olive green or

brown; the shields of the head, the scales of the neck, hinder part of body and tail, are edged with black; the body and hood are marked with black oblique bands, like the chevrons on a sergeant's sleeve. Apparently there are several varieties with modifications of coloration, but the general characters are essentially the same. The young, however, differ considerably from the old, and might be mistaken for another genus; they are black, with numerous white, equidistant, narrow cross-bands. The shields surrounding the occipital are large, and give a distinctive character to the adult snake. This snake, though widely distributed, is not anywhere common, and probably does not destroy many human lives; but it is very deadly, and its gold-colored virus seems to have similar effects to that of the cobra. I had several specimens in Calcutta, one of nearly twelve feet in length, but it has been seen of a greater length. It is apparently not found in the North-West or Central India, but in Bengal, Burmah, Assam, Orissa, Southern India, and the Sunderbunds. One was killed in the Botanic Gardens of Calcutta of 8½ feet long. The ophiophagus, like many other snakes, takes to the water readily. A friend informed me that he shot one in the river near Terryah Ghat, at the foot of the Khasyah Hills. He was going slowly up the stream in a boat, when he met it coming toward him with its head raised several inches out of the water. This individual was above nine feet in length.

The Rev. Dr. Mason, in his work on Burmah, gives the following account of the ophiophagus:—

The natives describe a venomous serpent which grows to be ten or twelve feet long, with a short blunt head, a dilatable neck, thick trunk, and short tail; it is of a darker color than the cobra, or nearly black. I have never seen it, but the description accords so well with the generic character of Hamadryas, that it must be a species of that genus.

"The Hamadryas," says Dr. Cantor, "is very fierce, and is always ready not only to attack, but to pursue when opposed."

This, too, is a conspicuous trait in our Tenasserim serpent. An intelligent Burman told me that a friend of his one day stumbled upon a nest of these serpents and immediately retreated, but the old female gave chase. The man fled with all speed, and terror added wings to his flight, till, reaching a small river, he plunged in, hoping he had thus escaped

his enemy; but, on reaching the opposite bank, up reared the furious Hamadryad ready to bury his fangs in his trembling body. In utter despair he bethought himself of his turban, and in a moment dashed it on the serpent, which darted at it like lightning, and for some moments wreaked its vengeance in furious bites, after which it returned quietly to its former haunts.

Karens from Pegu describe a species of Hamadryad with black and white transverse bands. It is often seen twelve feet long by a foot in circumference, and one of my informants tells me he has seen them three fathoms long and proportionately large.

The Bengalee name is Sunkorchor. It is found in the forest and grass jungle. It is said to live in hollow trees, and to climb them readily, being frequently found resting in the branches. As its name implies, it feeds on other snakes, though probably, when its favorite food is not forthcoming, it is contented with birds, small mammals, frogs, fish.

It resembles the cobra, except that it is longer in proportion to its size, and its hood is relatively smaller; it is even more graceful in its movements and turns more rapidly; it is occasionally seen with the snake-charmers, who prize it highly as a show, but they say it is very dangerous to catch and difficult to handle before its fangs are removed. A fine specimen of the ophiophagus of about nine or ten feet in length lived for some ten years in the Zoological Society's Gardens, Regent's Park, and died a year or two ago; it consumed numbers of the common English snakes, and, I believe, would eat nothing else. It seemed a quiet, unaggressive creature until roused, when it would raise its head, dilate its hood, and strike at any object brought near it. I have had several living specimens when in India, and never saw anything to suggest the idea that they were fiercer or more aggressive than the cobra; on the contrary, they seemed, if anything, less irascible and disposed to strike. The poison is as active and very similar in its effects to that of the cobra. I have no means of ascertaining the extent of injury to human life done by this snake. There can be no doubt that its bite is most fatal; but, from its comparative rarity and the remoteness of its haunts, it seems probable that human beings seldom fall victims. I may note here that the largest living specimen I ever possessed was nearly twelve feet in length; it came from Burmah and was of the dusky variety.

Bungarus.—In this genus there are two Indian species; both are common, but the *Bungarus caruleus*, or krait, is probably, next to the cobra, the most destructive snake to human life. The other species, *B. fasciatus*, sankni or raj-samp, is probably equally poisonous; but it is not so much brought in contact with men, and therefore occupies an inferior position to *caruleus* as a destroyer of human life.

The krait is of a dark, almost steel-blue black to a chocolate brown, with narrow white cross streaks, rings, or bars of white; the ventral surface is of a dark livid color, or of a white or yellow tinge; but there are varieties in the form of coloration. This species is common all over India. The fangs are smaller than those of the cobra, and its poison is not so rapid in its action; but it is very dangerous and destructive. It is found in the fields, in grassy plains, rice ghats, low scrubby jungle, and among debris of wood and buildings. It insinuates itself into houses, into the bath-rooms, verandas, on the ledges of doors, jhilmils, book-cases, cupboards; it is in such situations that it not unfrequently causes fatal accidents.

I remember an instance where, after a night's journey in a palanquin, a lady, in taking out her things, found a krait coiled up under her pillow; it had been her travelling companion all night. It is sometimes mistaken for *Lycodon aulicus*, an innocent snake which it much resembles; but the least examination detects the difference. The krait grows to the length of nearly four feet. There was one in the Indian Museum of 47½ inches, but it is usually much smaller. The scales along the dorsal region are hexagonal and very characteristic.

*B. fasciatus* (Raj-samp or Sankni).—Bites from this snake are comparatively rare, but are very dangerous when they occur; it is larger than *caruleus* and is beautifully marked with rings of yellow on a dark steel-blue ground. The metallic lustre of the skin is very beautiful; its body is of a triangular shape, and it has the characteristic hexagonal scales along the dorsal ridge.

I killed one in Rangoon of over five feet in length. It is tolerably common in Bengal, Burmah, and Southern India, and is known in the North-West. Its bite is very fatal, like that of the krait; but, as

men are not so much exposed to it, it is not so destructive as that snake. It is found in the open country, in grass, low jungle, and in the fields, in holes in the ground, sometimes deep down among the roots of trees. It is not often found in inhabited places, but does sometimes find its way into a native hut, as in the case of the one killed in Rangoon, where it disturbed a hutful of coolies during the Burmese war. It feeds, like the krait, on small animals, mice, birds, frogs, lizards—probably on small snakes and even insects. It is not very aggressive, and tries to escape when discovered; but, when attacked, retaliates fiercely. It lies coiled up, and, when disturbed, jerks itself out like a spring, but does not extend its whole length of body.

*Xenurelaps*.—There is only one species of this genus, which is exceedingly rare, and is closely allied to *Bungarus*. As it does not contribute to the death-rate, I pass it with this brief notice.

*Callophis*.—This genus has several species in different parts of India, which are all more or less brilliantly colored. They are not aggressive, and bite reluctantly. The poison is fatal to small animals, but there is no reason to suppose they destroy human beings; so it is not necessary to do more than enumerate them as *Callophis intestinalis*, *C. maclellandi*, *C. anularis*, *C. trimaculatus*, *C. nigrescens*, *C. cerasinus*.

The viperiform sub-order has two families—Viperidæ or Vipers, and Crotalidæ or Pit Vipers. These are represented in India—the former by two genera, *Daboia* and *Echis*, each of which has one Indian species, viz. *Daboia russelli*, or Tic Polonga, Uloo-bora, Sea-Chuuder, Jessur, and other local synonyms, and *Echis carinata*, or Kuppur, Afæ, and other synonyms: both very dangerous snakes.

The latter has several genera: *Trimeresurus*, with seven species; *Peltopelorus*, one species; *Halys*, two species; *Hypnale*, one species. These snakes are all venomous, but few deaths are attributed to their bite.

The *Daboia* (*Daboia russelli*), sometimes called cobra-monil and chain viper, is a very beautiful snake; it is of a light chocolate color, with three series of large black, white-edged rings; a yellow line is on each side of the upper surface of the head, these lines converging on the snout; rectal and labial shields yellow, with brown

margin, a triangular, brown, black-edged spot behind the eye; ventral surface yellowish, or marbled with more or less numerous semicircular brown spots on the hinder margin of the ventral shields.

It attains a considerable size—forty to fifty inches. I had one which was forty-four inches in length, and four and a half in circumference. It is common in Bengal, the south of India, Ceylon, and Burmah, and probably may be found all over the plains, and on the hills up to 6,000 feet in Cashmir; but its usual habitat is lower. I am not sure about it in Central India, the North-West Provinces, and Punjab; but, if there, it is less common than further south.

Dr. Russell says it is doubtful whether it is not as venomous as the cobra. My experience inclines me to so nearly agree with Dr. Russell as, at all events, to place it next the cobra. Fowls bitten by it sometimes expire in less than a minute. The effect of the poison is different to that of the colubrine snakes; it causes complete fluidity of the blood, and other conditions already referred to. It is nocturnal in its habits, is sluggish, and does not readily strike unless irritated, when it bites with great fury; it hisses fiercely and strikes with great vigor. Its long movable fangs are very prominent objects, and with them it is capable of inflicting deep as well as poisoned wounds. Its loud hissing, when disturbed, is calculated to warn those who approach it. It does not appear to cause many human deaths, but it may be that its misdeeds are sometimes ascribed to the cobra. The official returns ascribe many deaths to snakes unknown; were the real culprit detected, it is probable that the *daboia* would figure more prominently than he does at present. It is a hardy reptile. I had one, forty-four inches in length, which obstinately refused food or water for a whole year, and was vigorous and venomous to the last, when it died suddenly. The *daboia* is said—and one can well believe it—to kill cattle frequently when grazing, by biting them about the nose or mouth. In proof of its sometimes sluggish nature, there is a well-authenticated case of a young person who picking one up, and, mistaking it for an innocent snake, carried it home; its true character was discovered when it bit a dog or some other animal. It had not attempted to injure the person who carried it.

*Echis*.—There is only one Indian species, *Echis carinata* (Kuppur, Afæ). This snake is much smaller than the daboia, and grows to the length of twenty inches or more; it is terrestrial and viviparous. I have never seen it in Bengal, but it is common in the North West Provinces, Punjab, Central Provinces, Scinde, and generally in the south of India, in the Annamally Hills, in the Carnatic, and in the vicinity of Madras. It is of a brownish-gray color, with a series of quadrangular or sub-ovate whitish spots edged with dark brown; a semicircular band on each side of the dorsal spots enclosing a round dark-brown lateral spot; a pair of oblong, brown, black-edged spots on the centre of the head converging anteriorly; a brownish spot below, and an oblique hood-streak behind the eye; ventral surface whitish, with brown specks. The head presents the appearance of being marked by a cross. The scales are keeled; those on the lateral series have their tips directed downward obliquely; it is the friction of these against each other that gives it the power of making a peculiar rustling sound. The echis is a very fierce and vicious viper; it throws itself into an attitude of defence and offence, coiled up like a spring, and rustling its carinated scales as it moves one fold of the body against another. It is aggressive, and does not wait to be attacked before darting its head and body out at its enemy, the mouth wide open, and the long fangs vibrating, presenting a most menacing appearance. It is very poisonous; the virus is very active, and of the same character as that of daboia. There can be little doubt that it destroys many human lives, as men are much more exposed to contact with it than with the daboia, because it is of so fierce and aggressive a nature. It is said to live largely on the Scolopendridæ, but probably it preys also on small mammals, frogs, and small birds. For reasons previously given, I am unable to say to what extent it is destructive to human beings; but, from the circumstances under which it exists, there is little doubt that in some parts of India it is chargeable with a considerable number of deaths.

The Crotalidæ or pit vipers have several genera in India. They are less dangerous than their American congeners, but are all poisonous. They are remarkable for the pit or depression between the eye and nos-

tril in the loreal region; the triangular broad head, and short thick body.

The Halys is the only Indian genus or species with any vestige of the caudal appendage, which has given the name of rattlesnake to certain American Crotalidæ, and in this species it is reduced to a horny spine at the end of the tail.

Many of the Indian Crotalidæ are arboreal snakes, and in color resemble the foliage and branches of the trees in which they live.

There are several genera: Trimeresurus: *T. gramineus*, *T. erythrurus*, *T. carinatus*, *T. anamallensis*, *T. monticola*, *T. strigatus*, *T. macrosquamatus*. Peltopelor: *P. macrolepis*. Halys: *H. himalayanus*, *H. ellioti*. Hypnale: *H. nepa* (or Carawilla).

Cantor says of Trimeresurus: "Although the genus has venomous organs as highly developed as Crotalus or Viper, the effects produced by wounds of this species at least appear to be less dangerous than might be supposed." Hodgson saw a man who was bitten by one suffer severely from pain and swelling, but he never heard of a fatal case. All who have had any experience say the same—the symptoms are severe pain and swelling of the bitten part, with nausea, sickness, depression, fever, and even sloughing of the bite, after which recovery is rapid. The effects, in short, are not unlike those produced by an adder. It is needless to discuss this any further, for all the genera and species seem to be about the same in this respect. The *Hypnale nepa*, or Carawilla, of South India is reported to be very dangerous, and is dreaded; but its bite, if ever fatal, is exceptionally so to man. It is possible that a few of the deaths may be due to these creatures, but they can be but very few.

It remains now only to make a brief reference to the pelagic colubrine snakes, or hydrophidæ. The members of this family may be recognized at once by the peculiarities of their conformation, which is adapted for an aquatic life. They are all, so far as is known, venomous, and inhabit the sea—the salt-water estuaries and tidal streams. They have a very wide range of distribution in the Indian and Pacific Oceans.

They have a great variety of form, but the transitions are very gradual; some attain a considerable length—I am not able to say how large, but have not seen one of

more than five feet; no doubt they often exceed this. They are very poisonous, and, though accidents are rare, yet I have the records of cases where their bite proved fatal, as in the case of a sailor of H.M.S. "Algerine" at Madras; in another of a sea captain at a port in Burmah; another of a fisherman bitten in the Salt Lake near Calcutta—all fatal. The fishermen and sailors on the coasts know their dangerous properties and avoid them.

The hydrophidæ have smaller heads, jaws, and fangs than the land snakes; the fangs have open grooves in some, but not all. The virus is very active, and appears to operate as speedily and certainly as that of the land snakes. They have an elongated body like the land snakes; in some instances it is short and thick; in others it is very thick toward the tail, and most disproportionately elongated and attenuated in the neck, while the head is very minute. The coloration is varied, often brilliant and beautiful. The hinder part of the body and tail is flattened and compressed vertically, almost like the fin or tail of a fish, and it answers the same purpose, for with it they swim with ease and rapidity. They live, with rare exceptions, in the sea or tidal water; when thrown on the land by the surf, as they frequently are, at Poorie and other places along the coast, they are helpless and almost blind. Their food is fish and small aquatic creatures which they pursue and overtake in the sea. There are certain parts of the Bay of Bengal where they are seen in great numbers, and their movements in the blue water are agile and beautiful. There are four genera of the family in the Indian seas: *Platurus*, *Enhydryna*, *Pelamis*, *Hydrophis*. *Platurus* has two species, *P. scutatus* and *P. fischeri* (Bay of Bengal, tidal streams near Calcutta). This genus has several characters of the land snakes, e.g. well-marked ventral shields: body sub-cylindrical and not compressed like the hydrophis; color is black, tinged with yellow.

*Enhydryna* has only one species—*Enhydryna bengalensis* (Valakadyen); it is very poisonous, body compressed, belly carinate, tail flat and compressed, almost like a fish's fin; color bluish-gray, with dark bands of the same, though deeper color; no ventral shields. *Pelamis* has only one species—*P. bicolor*,—one of the most curious sea snakes in the Bay of Bengal;

no ventral shields; body flattened, yellow sides and belly, back black; it is called kullundur and is very poisonous. The species of *hydrophis* are numerous; in the Indian Seas about thirty have been described, and there are probably others. They present a considerable variety of form and coloration; some have elongated necks and small heads, the posterior part of the body being larger than the anterior; others have not this characteristic; but they have all a strong family likeness, and may be recognized at once by their compressed bodies, finlike tails, and the general absence of well-marked ventral scutæ. Their coloring is also remarkable, green, yellow, black, in bands or rings, being a common pattern. They are all poisonous, and, in a few experimented with, the virus was most deadly. The fangs are small and in some partially grooved. They are entirely pelagic, though they enter the tidal rivers, and, when thrown on shore, are helpless. They are delicate, and seldom live long in captivity. A *H. coronata* sent to me from one of the tidal streams near Calcutta lived some days in a large tub of salt water, which was frequently changed; it proved its venomous character by biting and rapidly killing a fowl. This snake had a very small head and slender neck, which was more than one-third of the creature's entire length. It was of yellowish olive ground-color, with about fifty blackish rings, which were broader than the interspaces. Head and ventral side of the neck black, the former with a yellow horseshoe-shaped mark across the frontal and nasal shields; tail had ten or twelve black cross-bars; ventral shields distinct, being rather larger than the ordinary scales.

Space does not admit of more detailed description of the other species. This one may be taken as a type of all. It is impossible to mistake them, and they are all, as far as known, poisonous. They cause occasional accidents to swimmers or to fishermen, or others who handle them when taken out of nets, or picked up on the shore; but they certainly do not contribute to any extent to the death-rate of either men or domestic animals. It is difficult to conceive of what use the poison can be to them.

The mortality from snake-bite is very great. The average loss of life during the last eight years has been 19,880 human

beings, and 2,100 head of cattle yearly. I regret that I am unable to state how many of these deaths are to be ascribed to the cobra, or each particular snake, as I have been unable to obtain any reliable returns which entered into this special detail. But when conducting an investigation into this subject in India some years ago, I was then able to make out that of 11,418 deaths of human beings in 1869, out of a population of 120,914,283, 2,690 were assigned to cobras, 359 to kraits, the balance being caused by snakes unnamed. This return is of little value, but it indicates what is well known, that the cobra is by far the most destructive of the venomous snakes of India. Mr. V. Richards, who has investigated the subject closely, says the cobra causes nine-tenths of the human deaths. The snakes which are most destructive to life are probably in the following order: The cobra, *Naja tripudians*; the krait, *Bungarus caruleus*; the kuppur, *Echis carinata*; Russell's viper,

*Daboia russelli*; the hamadryas, *Ophiophagus elaps*; the Raj-saump, *Bungarus fasciatus*. The hydrophidæ are probably not less dangerous, but they are comparatively rare, and seldom brought in contact with human beings, and thus do not contribute so largely to the death-rate.

The number of snakes destroyed, in 1887, amounted to 562,221, for which rewards amounting to Rs. 37,912 were paid. The table shows in detail the number of human beings and cattle killed by all poisonous snakes together, the number of snakes killed, and the amounts paid for their destruction each year from 1880 to 1887 inclusive. Appended also is a short statement showing the deaths from snake-bites in different parts of India during the year 1887, the latest reports we possess; with a late resolution in the Home Department, which shows how far the Government of India is interesting itself in this question.

*Destruction of life in India by snakes from 1880 to 1887.*

	1880	1881	1882	1883	1884	1885	1886	1887
Number of people killed ..	19,150	18,670	19,519	20,067	19,639	20,142	22,134	19,740
Number of cattle killed ..	2,336	2,029	2,167	1,644	1,728	1,483	2,514	2,716
Number of snakes killed ..	212,776	254,968	322,401	412,782	380,981	430,044	417,596	562,221
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Amount of rewards paid..	11,064	11,996	14,673	22,353	28,551	25,213	25,361	37,912

#### DEATHS FROM SNAKE-BITE IN 1887.

In *Madras*, 1,263 people were killed and 1,070 cattle; 302 snakes were destroyed, and no rewards paid.

In *Bombay*, 1,168 people were killed and 48 cattle; 311,476 snakes were destroyed, and Rs. 6,269 paid in rewards.

In *Bengal*, 9,131 people were killed and 509 cattle; 35,054 snakes were destroyed, and Rs. 4,433 paid in rewards.

In the *N. W. Provinces and Oude*, 5,765 people were killed and 216 cattle; 23,864 snakes were destroyed, and Rs. 3,140 paid in rewards.

In the *Punjab*, 843 people were killed and 77 cattle; 177,080 snakes were destroyed, and Rs. 22,826 paid in rewards.

In the *Central Provinces*, 928 people were killed and 44 cattle; 2,065 snakes were destroyed, and Rs. 844 paid in rewards.

In *Burmah*, 213 people were killed and

428 cattle; 8,431 snakes were destroyed, and no rewards paid.

In *Assam*, 198 persons were killed and 190 cattle; 269 snakes were destroyed, and Rs. 15 paid in rewards.

In *Coorg*, 1 person was killed and no cattle; 48 snakes were destroyed, and Rs. 8 paid in rewards.

In the *Hyderabad Assigned Districts*, 182 people were killed and 134 cattle; 697 snakes were destroyed, and Rs. 140 paid in rewards.

In *Ajmere* and *Merwara*, 47 persons were killed and no cattle; 575 snakes were destroyed, and no rewards paid.

In *Bangalore*, 2 people were killed and no cattle; 660 snakes were destroyed, and Rs. 236 paid in rewards.

#### *Extracts from Home Department Resolution for 1886, referring to Venomous Snakes.*

The number of deaths from snake-bite rose from 20,142 in 1885 to 22,134 in 1886.

Of the total mortality by wild animals and

snakes, no fewer than 18,805 cases occurred in the Lower Provinces of Bengal and in the N. W. Provinces and Oude, and of this number 16,926 deaths were caused by snakes alone. . . .

The mortality in the several provinces does not vary much when compared with the figures of the preceding year, except in the N. W. Provinces and Oude, where there was an increase in deaths from snake-bite of 1,499, which chiefly accounts for the somewhat large increase in the total mortality of the year. . . .

There was a falling-off in the number of snakes killed from 420,044 to 417,596. As in previous years, the provinces in which snakes were largely destroyed are Bombay, Bengal, the N. W. Provinces and Oude, and the Punjab. The decline is due to a large decrease\* in the number of snakes destroyed during the year in Bengal, the cause assigned being the same as that alleged for the falling-off in the number of wild animals killed, namely, the small amount available for the payment of rewards. This matter is also being inquired into by the Local Government. In the Hyderabad Assigned Districts, the system of granting rewards for the destruction of snakes, which was in force only in municipal towns, has been extended to towns with dispensaries, and rewards are now paid on the authority of certificates granted by hospital assistants—a measure which the Resident believes will act as an inducement toward the destruction of snakes.

As regards the measures to be adopted for reducing the annual loss of life by snake-bite, I stated my views in 1872, and they are much the same now as they were then. The chief points are, to make known the appearance and habits of the poisonous snakes, and to institute proper rewards for their destruction. With a plain description and a faithful representation in color of each species, such as is given in the *Thanatophidia of India*, the

people can be made acquainted with the characters that distinguish the venomous from the harmless snakes, and thus learn to avoid or to destroy them. A rate of rewards varying from 8 annas to 2 annas, according to the species, was and is again suggested. From the last reports published it appears that rewards, when offered at all, are too small; while some local authorities consider the plan of rewards to be altogether futile, some hold that it conduces to the breeding of serpents and their increase rather than diminution. The subject has often received the careful consideration of the Indian Government, and a variety of measures have been resorted to with a certain amount of success; but it is to be feared that, until a well-organized system be adopted and carried out on the lines suggested, the evil will not be fairly grappled with and overcome.

Something has been, but still more might be, done. There should be more concentration and organization; regulations should be laid down and uniformly enforced throughout the whole of India; while every encouragement should be afforded to those to whom is entrusted the duty of dealing with an evil which is, to a certain extent, removable, while a higher scale of rewards should be offered for the destruction of the snakes. Until some such measures are generally and systematically resorted to, there will be no material diminution in the loss of human life from snake-bite, which cannot now be rated at much under 20,000 annually.—*Nineteenth Century*.

## MADEMOISELLE.

### A STORY IN TWO PARTS.

BY MRS. OLIPHANT.

### PART II.

#### CHAPTER V.

CLAIRE DE CASTEL-SOMBRE touched her room in a condition of mind in which, though this was quite unusual, she forgot altogether that she was Mademoiselle and became herself, a woman of strong feel-

ings, great personal pride, and a temperament impassioned and imperious rather than subdued and calm. It was subdued under the burden of all those necessities which made her natural impetuosity almost a crime, so out of place was it, and out of keeping with every circumstance around her; but such subjugation, being

\* 1885 : 53,995. 1886 : 31,204.

artificial, is always at the mercy of an emotion or an impulse too strong for manufactured bonds, and at this moment the natural flood had swelled beyond all restraint. Her usual paleness was flushed with angry color. Her eyes shone, her whole figure thrilled with an excitement which was beyond all restraint. A curious consequence, one would suppose, of a proposal of marriage made by a young man considered eligible in every way in circles much more exacting than Mrs. Leicester Wargrave's daughters or sister, much less her governess. But Claire was roused by emotions which would not have influenced these young ladies. It was not that there was anything in the English language which prevented her full understanding of what was said to her, or in the habits of Englishmen; but perhaps something of French breeding, and something of the involuntary depression and susceptibility which are fostered by such a position as hers, turned her from the natural interpretation of such an overture to a strained and false one. She thought that she had been insulted by a light proposal which meant nothing, which was not intended to mean anything, which was a sort of jibe and no more; and every sentiment in her mind, as well as every drop of blood in her veins, seemed to rise up again. "You might marry me;" it meant contempt, or suggestive of an impossible escape from the subdued state which, in the first place, it was insulting for any man to remark upon. A woman who does her duty in the position which her circumstances compel her to accept, whose pride lies in accepting those circumstances as not alone the only possible, but as the most natural and dignified, is not a woman to be insulted, she said to herself, passionately stamping her foot upon the floor in her paroxysm of wounded pride and feeling. In her usual condition Mademoiselle would have been bitterly ashamed of that stamp upon the floor. She was even now, in the fumes of her passion, and blushed for herself, clenching her hands, which was a noiseless operation, to stay in herself any possible repetition of that *bêtise*. All good feeling, all honor, all justice even, forbade that a woman should be jeered at for circumstances she could not help, circumstances which her strength lay in making the best of, in taking the sting out of by a dignified ac-

ceptance of them, in which there should be neither question nor assumption of injury, nor the pose of a person wronged. Above all things that pose of wrong was abhorrent to Claire. It went against her pride to acknowledge that she was in an inferior position, a dependent, and in the cold shade. Her pride had been to ignore all that, to define her place as clearly as possible, and make it fully comprehensible that it was the place which she chose and that pleased her best. To remark upon it at all, as Mr. Charles Wargrave had done, even though in a way that was intended to be flattering, was very bad taste, to say the least; but to end these remarks by such a suggestion, by an offensive jest, was an insult in every sense of the word. Her blood boiled in her veins. She walked up and down the room to wear out as far as she could the exasperation that possessed her, not stamping her foot any more, which was a humiliating confession of weakness, but pacing up and down because she was incapable of keeping quiet. A woman who had always avoided any folly of so-called sensitiveness, who had accepted everything with a smiling face, never murmured, never taken offence, consented to be Mademoiselle, and to dignify the title by the perfect philosophy of her self-adaptation to it—and after all these years, after all these heroisms, after her proud self denials and self-subjugation, to be thus insulted! a sneer flung full in her face, a dart of contempt to her heart! Mademoiselle felt as if that sneer had struck her like a blow. Her face burned with the smart of it; she had the sensation of the physical shock as well as of the rush of blood to the brain which is its result.

And there was this special smart in it, that she had been beginning to find in Charles Wargrave a friendly figure, a sympathetic look. He had not been so often in the schoolroom, so often at the luncheon-table, without exchanging now and then a word with herself which had made her feel that he was more akin to her than his relations were, more able to understand. The people under whose roof she had lived for a year had not the faintest beginning of understanding, nor were they likely to have it should she remain there for five years more, which was very likely if she continued to "give satisfaction." But he had looked at her now and then as

if he recognized that she was an individual, and not merely Mademoiselle. He had asked her opinion on one or two subjects on which he and she were in accord against the other stolid couple whose point of view was so different. Mademoiselle had not been able to deny to herself—nay, had done so with serious pleasure—that she liked to see M. le Cousin, that he was one of the few people whose entrance was agreeable to her. The fact that he was young made no impression upon this well-trained stoic. She herself was old, she was on the level of men ten years her senior, according to a well-understood chronology current in society. There might not be, perhaps, much actual difference between them in point of years, but, according to this system, she was at least ten years in advance of her male contemporaries. It is difficult, perhaps, to know the reason why, but it is perfectly understood by everybody. She was “old enough to be his mother,” and she had no feeling that it was otherwise. She regarded him as so completely out of her sphere, in character and in age, as well as in circumstances, that it had never occurred to the imagination of Claire that he and she should meet anywhere save as they sometimes did, on the ground of a mutual opinion, a common taste. But this was enough to make her feel that it was an outrage greater and more painful than usual, that scorn or insult should come from him.

There was a knock at the door while Claire had as yet scarcely regained any of her usual composure. “Please, Mademoiselle, mother wants to know if you’re coming down for tea?”

She paused a moment to master herself, and then opened the door. “Not this afternoon, Edith. As you are going out with your mother I am going to begin my mending, do you see?” There were some garments laid out upon the bed that supported her plea. The little girl cast a glance upon the high color, so unusual in her governess’s cheeks, and ran off, with a vague sense of something which she did not understand.

“She’s not coming; she’s going to mend her things; and, oh! mamma, she’s got such a red face, like she does when she’s furious with us!”

“To hear these little monkeys,” said Mrs. Wargrave, “you would think Mad-

emoiselle had the temper of a fiend. But she hasn’t, Charlie; don’t take up a false impression. She is really one of the best-tempered women I ever knew.”

If any one had looked at Charles Wargrave at that moment it would have been seen that he had “a red face” too; but he said nothing, and presently went away.

That evening, sitting alone in the school-room, having so exercised the power over herself which she had acquired by the practice of many years as to banish the unusual color from her face, to subdue the over-beating of the heart and pulses, and to present to the eager eyes of the children, when they returned from their drive, the same calm countenance with which they were acquainted, Mademoiselle received a letter which made her glad that she was alone, with nobody to spy the changes of her face. It was very short, and, though she had never seen his handwriting before, she knew that it was from Charles Wargrave before she had taken it from the attendant housemaid’s tray. It was as follows:

“I feel that I have offended you, though I scarcely know why. I spoke hastily, without considering the form of words I used. If you had been an Englishwoman you would perhaps have thought less of that; but as you are you are the only woman in the world for me. My hasty proposal was not hasty in meaning, and it was made in all reverence and respect, though I fear you did not think so. Forgive what has seemed to you careless in the expression, but believe in the love that made it. Say I was rude, and punish me as you please, but reply; and oh! if you can, accept

“Yours ever and only,

“C. W.”

Mademoiselle read this letter over three times, almost without breathing, and then she laid it down on the table before her, and grew, not red, but pale. Her lips dropped apart with a long-drawn breath which seemed to come from the very depths of her being; the blood seemed to ebb away from her heart; she grew white like marble, and almost as chill, with a nervous shiver. She was terrified, panic-stricken, dismayed. If all the anger had gone out of her it had been replaced by something else more trying still. Aston-

ishment in the first place, dismay, a panic which impelled her to rise and flee. But this it was impossible to do out of this well-regulated house, where all went on with such unflinching routine, and there were no breaches either of decorum or of hours. To have gone out after dinner, unless for an understood engagement, would have scandalized every inmate, as well as Mademoiselle herself, who also had far too much good sense to allow for a moment, even to herself, that it was possible to run away. No; she had, as is usual, something much worse to do—to remain; to meet the man who, she thought, had insulted her, who, instead of insulting her, had done her the greatest honor in his power, who had attracted her sympathy and liking, and now had made himself one of the most interesting of all mankind in her eyes—to meet him without betraying by a sign that anything had ever passed between them more than good-night or good-morrow, to discourage and dismiss him summarily at once, yet to be always ready to receive him when he deigned to converse with her, as though never a word had been said between them which all the world need not hear. Mademoiselle's first impulse was absolute dismay; the embarrassment of the situation struck her above everything else. Everything about it was embarrassing. She would have to answer his letter, yet she must put her answer in the post herself, keeping it away from all prying eyes: for why should she write to Charles Wargrave, the cousin of the house? Supposing that the housemaid saw it, that Edith or Dorothy saw it? Though she was utterly blameless, how could that be proved—how could she keep their untutored minds from drawing their own conclusions? She had nothing whatever to blush for, and yet she blushed instinctively, involuntarily, at the idea of being found out in a correspondence with Charles Wargrave. How much more, she said to herself with fright, had she accepted his offer (wild thought which sent all her pulses beating!) And then she must meet him absolutely unmoved; not only without a look or word, but without the suspicion of a breath that could have any meaning. The air must not move a fold of her dress or lock on her forehead, lest it might be supposed that she trembled. These were difficulties of which he would never think—how should he?—of which nobody

would think who was not in her position. And though nothing else came of it, this must come of it. Nothing else! What else? She paused, with a shock of abrupt cessation in her thoughts, as one does who suddenly stops running. What else? Nothing else except this—that she could never be at her ease, but must always seem to be at her ease, in Charles Wargrave's presence, again.

In the meantime, the first thing to be done was to answer his letter; that was a thing that could not be delayed, that must be accomplished at once. And yet it took a long time even to begin it. Mademoiselle arranged the paper upon her desk a dozen times before she was satisfied. She did more than this. She shut up the schoolroom writing-table, where all her usual writing was done, and fetched from her bedroom a little old desk, a relic of girlish days, once pretty in its inlaid work and velvet lining, now sadly shabby in faded finery. She did not even say to herself what freak of fancy it was which made her produce this old toy, this treasury of girlish souvenirs, for the serious purpose she had in hand. It gave her a great deal of trouble, for there was no ink in the minute ink-bottle, no pens in the tray, nothing she wanted. She had to bring the paper from the writing table, and all the other accessories. Even after she had surmounted these obstacles there was still a considerable delay. She wrote a letter in French, and then one in English, and tore them both into small pieces, and it was not till almost midnight, after all the other members of Mr. Leicester Wargrave's family were in bed, that Mademoiselle succeeded in producing the following, which, though it did not please her, she sent, as being the best she could do:

"I am very thankful, sir, that it is not as I at first supposed: and indeed I ought to have known better, and never to have believed that an English gentleman would insult a woman in my position. I thank you that you have not done so; but, on the contrary, complimented and indeed flattered me to a very high degree.

"In return I send you a very direct answer, as you have a right. There can be no question, sir, of my accepting a gift far too great, which I had never anticipated, to which my thoughts were never

directed at all. It would be a poor compliment in return for your goodness if I should take what you offer as carelessly as if it were a cup of tea you were offering me. Oh, no! no! I respect you too much to do so. A moment's thought will also show you how very unsuitable in every way it would be. You are young, you are rich, you have all the world can give. I am old—a middle-aged woman. I have nothing at all but the *beau nom* you were so good as to recognize. It does not mean even what it would mean in England, it means nothing; in my own country, being poor, I would not even carry it. My mother calls herself in Paris only Madame Castel. And, chief of all, I am more old than you, middle-aged; it is therefore a thing beyond the possibility of even taking into consideration at all.

"Adieu, monsieur, je vous remercie de tout mon cœur; vous ne m'avez pas insultée, vous m'avez flattée; je réponds avec une vive reconnaissance. Que le bon Dieu vous donne tous ce que vous pouvez désirer hors la pauvre et obscure créature qui s'appellera toujours

"Votre obligée,

"CLAIRE DE CASTEL-SOMBRE."

She wrote this in great haste at last, and without even trusting herself to read it over, fastened it hastily into its envelope. She was so frightened lest anybody should see it—lest it should fall under the eyes of any youthful observer, whether pupil or attendant—that she put it by her bedside unaddressed until the morning, when she concealed it in her pocket until, in the course of the morning's walk, she could put it into the nearest post-office. Perhaps it was her sense of wishing to conceal which made the children's chatter so significant to her. "Oh, Mademoiselle," said Edith, "why didn't you send your letters out for the early post with mother's?" "And why didn't you give it me to carry?" cried Dorothy; "you know I'm always the postman." "Mother would say it was to somebody, and you didn't want us to see the address," said the one little importunate. "And you needn't have been so careful, Mademoiselle," said the other, "for I would never have told who it was." "There is no question of telling," said Mademoiselle very gravely, to stop further discussion; but as she turned away from the post-office

another dreadful and unforeseen accident happened. Charles Wargrave came up to the group. She felt her heart leap from where it was, very low down in her being, up, up to her throat. The children seized upon their cousin as usual, while she walked along by their side with downcast head. They told him all the story, how Mademoiselle had been posting a letter and would not let any one see the address. "And I always put the letters in the post," said Dorothy, aggrieved. Mademoiselle kept her eyes down, and would not meet the look which she divined.

#### CHAPTER VI.

It would not be easy to find a more difficult position than that in which Mademoiselle now found herself. She had just put into the post-box a letter to the man who came up at the moment, almost before it had disappeared, and before she had returned his bow, and evaded the hand held out to her in greeting. The children had informed him of this almost clandestine letter, which the governess would intrust to nobody, which she had posted with her own hands. He gave her a rapid look of inquiry, which she saw without making any response to it. She could even see, somehow, without looking, the flush that rose to his face on this intimation. He knew as well as she knew that the letter was to himself, and, perhaps, perceived for the first time, in a sudden flash of unconsciously communicated feeling, how it was that she had posted it herself, and the reluctance she must feel to allow the fact of her communications with him to be known. The flush on his face was partly pain at this discovery, and partly suspense on his own part, and the tantalizing consciousness that, though she was so near him, and a word—even a look—might enlighten him, neither word nor look was to be had from her. She had completely relapsed into Mademoiselle—the careful guardian of the children, a member of a distinct species, an official personage, not Claire de Castel-Sombre, nor any mere individual. She was at her post like a sentinel on duty, to whom the concerns of his personal life must all be thrown into the background. There was no place in the world where she would not rather have been than walking along the road toward Kensington Gardens by Charles Wargrave's side, though

with the potent interposition of Edith and Dorothy between. But, though he felt this, he went on, with a curious fascination, prolonging the strange thrill of sensation in himself, and glad to prolong it in her, to keep up in her the excitement and whirl of feeling which he knew must exist in the strange, concealed circumstances which for the moment, at least, bound the two together. To think that they should be walking thus, not speaking, she, at least, never turning her head his way, who possibly might be destined to spend all their lives together, to be one for the rest of their days! Charles felt, with a sickening sensation of failure, that there was little prospect of this; but yet that moment could never, whatever happened, pass from the memories of either for all their lives to come. He liked to prolong it, though he was aware it must give her pain, though it made himself giddy and dazed in the confusion and suspense. There was a cruel kind of pleasure in it—a pleasure that stung, and smarted, and thrilled every nerve. They walked thus, with the children chattering, along the side of Kensington Gardens toward Hyde Park, all the freshness of morning in the air, the sounds softened by summer and that well-being and enjoyment of existence which warmth and sunshine bring. When at last he left them, he would not let Mademoiselle off that touch of the hands which she had the excuse of French habit for eluding, but he the settled form of English use and wont to justify his insistence upon. It was another caprice of the excitement in his mind to insist upon shaking hands: but the hurried, reluctant touch taught him nothing, except that which he did not desire to learn.

Mademoiselle reached home much exhausted by her walk, and retired to her room, complaining of headache, which was very unusual; but not before the whole history of the morning had been reported to Mrs. Wargrave—the mysterious letter put in the post, the meeting with Uncle Charlie, and all the rest. Happily, no member of the Wargrave family required any reason, save his devotion to themselves, for Charles Wargrave's appearance. "He is so devoted to the children; it is quite beautiful in a young man!" their mother said. But she felt at the same time that Mademoiselle's behavior required looking into. A mysteri-

ous letter transferred from her pocket to the post-office, though Dolly was always the postman, and loved to be so employed—as if she did not want the address to be seen! and then the mysterious headache, so unusual in Mademoiselle, who, in delightful contrast to other governesses, never had headaches, never was ill, but always ready for her duties. Mrs. Leicester Wargrave was divided between the fear of any change which might deprive her of so admirable a governess, and that interest which every woman feels in the possibility of a romance going on under her eyes, and of which she has a chance of being the confidante. She graciously consented that Mademoiselle should not come downstairs to luncheon, but paid her a visit afterward in her room, with every intention of finding out what was the matter. She found Mademoiselle in her dressing-gown—that famous white dressing-gown—retired into her own chamber, but with nothing the matter, she protested; no need for the doctor—only a headache, the most common thing in the world.

"But not common with you, Mademoiselle," Mrs. Wargrave said, drawing a chair near, and putting her hand on the governess's wrist to feel if she were feverish; for, of course, she knew, or thought she knew, something of nursing, as became a woman of her time.

"No, it is not usual with me; I am glad, for it is not pleasant," said Mademoiselle.

"I am very glad, too, I assure you; for a person in the house with a continual headache is the most horrid thing! It is always such a pleasure to find you ready for everything—always well."

Mademoiselle smiled, but said nothing. She was not without sympathy for the employers of governesses who had perpetual headaches; at the same time, it is, perhaps, not exhilarating to be complimented on your health as a matter of convenience to another—though quite reasonable, as she was ready to allow.

"That is what makes me think," said Mrs. Wargrave, "that you must have something on your mind."

This assault was so entirely unexpected that Mademoiselle not only flushed to her very hair, but started from her half-reclining attitude in her chair.

"Ah," said Mrs. Wargrave, "I thought as much! I don't call myself clever, but it isn't easy to deceive me in

that sort of a way, Mademoiselle. I have noticed for a long time that you were not looking like yourself. Something has happened. The children—they are such quick observers, you know, and they tell me everything, poor things!—said something about a letter. You know, I am sure, that I don't want to pry into your affairs, but sometimes it does one good to confide in a friend—and I have always wished my governesses to consider me as a friend—especially you, who give so little trouble. I thought it might, perhaps, be a comfort to you to speak."

Mademoiselle, during this speech, had time to recover herself. She said only, however, with the most polite and easy way of evasion, "I know that you are always very kind."

"I am sure that I always mean to be," her patroness said, and she sat with her eyes fixed upon the patient, expectant—delighted with the idea of a sentimental confession, and yet rather alarmed lest this might lead to an intimation that it would be necessary to look for a new governess. Mrs. Leicester Wargrave meant no harm to anybody, and was, on the whole, an amiable woman; but, as a matter of fact, the thing that would have truly delighted her, real pleasure without any penalty, would have been the confession from Mademoiselle of an unhappy love.

And now there suddenly occurred an idea, half mischievous, half humorous, to Claire, who, in her own personality, had once been *espiègle*, and was not now superior to a certain pleasure in exposing the pretences of life. She scarcely understood how it was that, having finally and very seriously rejected the curious proposal which certainly, for a day or two, had done her the good service of quickening the monotony of life, she should have the sudden impulse of taking advice about it, and asking Mrs. Wargrave, of all persons in the world, what she ought to do. Caprices of this kind seize the most serious in a moment without any previous intention, and the thought that to get a little amusement out of Charles Wargrave's proposal was permissible, seeing how much embarrassment and annoyance she was sure to get out of it, came to her mind with a flash of amused impulse; she said, "I did not think I had betrayed myself; and, indeed, it is only for a day or two that I have had anything on my mind."

"Then there is something?" cried Mrs. Wargrave delighted, clasping her hands. "I was sure of it; I am a dreadful person, Mademoiselle; there is no deceiving me."

"So it would appear," said Claire, with a gleam of humor which was a little compensation, she felt, for her trouble. And she added, casting down her eyes, "I have had a—very unexpected—proposal of marriage."

"I knew it!" Mrs. Wargrave said. She added, more warmly than she felt, "And I hope it is a good one—and makes you happy. Tell me all about it, my dear."

It was not that she had never called Mademoiselle "my dear" before, for this is a word which glides very easily to some women's lips: but once more it made Claire smile.

"It makes me neither happy nor unhappy," she said, "though it is a very good one; for it is not a possible thing; except the trouble of vexing some one, it can do nothing to me."

"You can't accept it?" Mrs. Wargrave felt a momentary relief, and then a stronger sentiment seized her. She could not bear to have sport spoiled in the matrimonial way. "But why?" she said. "Why? Do tell me all about it. If it is a good offer, and there is nothing against the man, why shouldn't you accept it, Mademoiselle?"

"I have many reasons, Madame; but the first is, that I do not care for him at all. You do not accept an offer which you have never expected, never thought of as possible."

"Oh, if that is all!" said Mrs. Wargrave. "Good heavens! nobody ever would be married if that was to be the rule. Why, I never was more surprised in my life than when Mr. Wargrave proposed to me! That's nothing—nothing! If it is a good match—"

"It is much too good a match. The gentleman is not only much, much richer than I—that is nothing for I am poor—but he is better in the world in every way. His family would consider it a *mésalliance*: and it would be so completely to my interest—"

"But, good heavens!" cried Mrs. Wargrave again, "what does that matter? Let his family complain—that's their affair. You surely would never throw up a

good match for that? Is there anything against the man?"

"Nothing!" said Mademoiselle with some earnestness.

"Then, what does it matter about his family? I suppose he's old enough to judge for himself! And he could make nice settlements, and all that?"

"Very likely—I do not know. He is rich, I am aware of that."

"You surprise me very much," cried Mrs. Wargrave. "I have always heard that the French cared nothing for sentiment, that it was always reason and the *dot*, and all that, that was considered. Yet, here you are, talking like a silly girl. Mademoiselle, if you will be guided by me, you will not let any romantic nonsense stand in the way of your advancement. Dear me! you don't disapprove of married life, I suppose? You don't want to set up as superior to your neighbors? And, only think what your position is—Mr. Wargrave and I are very much satisfied with you, and I had hoped you would stay with us as long as Edie and Dolly require a governess; but you must reflect that you won't be any younger when that times comes. We are all growing older, and the time will come when ladies will think you are not lively enough to take the charge of young children; they will think you are not active enough to go out for their walks. Many people have a prejudice against old governesses. I want to put it quite clearly before you, Mademoiselle. Think what it is to go on slaving when you are an old woman. And you will never be able to earn enough to keep you comfortable if you should live to be past work; and what will you do? Whereas, here is, apparently, an excellent chance, a certain provision for you, and a far more comfortable life than any governess could ever expect. Goodness! what do you look for? You must accept it; you must not throw such a chance away. I can't hear of it; and any one that had your real interests at heart would say the same."

Mrs. Wargrave spoke like a woman inspired. She reddened a little in her earnestness, she used little gestures of natural eloquence. All selfish thoughts of retaining so good a governess for Edith and Dorothy had gone out of her mind. She could not endure that such a piece of folly should be perpetrated under her eyes.

"All that I know very well," said Mademoiselle. "I have gone over it too often not to know."

"And yet!" cried Mrs. Wargrave, with a sort of exasperation. "Come, come," she added with a laugh, "you are only playing with my curiosity. Of course you can't possibly mean to do such a silly thing as refuse. Poor man! when everything is in his favor and nothing against him! I never heard of such a thing. I can't have it! Your friends *must* interpose."

"But his friends will be most indignant—they will be in a state of fury—they will say I am an adventuress, a schemer, a designing woman—everything that can be said."

"Let them say!" cried Mrs. Wargrave in her enthusiasm; "what have you to do with that? Of course they'll say it. Men's friends always do: but what is it to you what they say? that's their concern, not yours. I suppose he is old enough to judge for himself."

"That is the last and greatest objection of all," said Mademoiselle. "He is quite old enough to judge for himself: but he is younger than I am. If all the rest could be put right, there is still that."

"Oh!" said Mrs. Wargrave, making a pause. "Well, that is a pity," she added slowly. "I don't much fancy these marriages myself. But," she said, pausing again, "it can't be denied that they turn out very well. I have known three or four, and they've all turned out well. And, besides, that's the man's own affair. If he is pleased, I don't see why *you* should object. Is it much?" she asked with a little hesitation.

"I am sure as much as—two or three years," said Mademoiselle firmly.

Mrs. Wargrave was so indignant that she sprang from the chair and all but stamped her foot. "Two or three years!" she cried. "Do you mean to laugh in my face, Mademoiselle? I thought you were going to say a dozen at least. I supposed it must be some boy of twenty. Two or three years!"

"No, not twenty, nor thirty, but still younger than I am."

"This is quite absurd," said Mrs. Wargrave sharply; "a year or two makes no difference, and you must let me say that it will be not only foolish but wicked, *criminal* to let such an opportunity slip.

How can you think of doing it, you who have a mother, and nothing but your own work to look to? How do you know how long you may be able to work? how can you tell what may come upon you if you slight a distinct interposition of Providence like this? I can't imagine what you are thinking of. Do I know the gentleman? Is he a Frenchman? I hope, when you have thought it over, you will not be such a fool as to send such a man away."

"No, he is not a Frenchman. He is English," said Mademoiselle, eluding the other question. "And do you think I could bear it that his family should call me all the names and turn against him?"

"His family!" repeated Mrs. Wargrave with fine scorn. "What have his family to do with it? It will be the most dreadful folly in the world to give up your own happiness for anything his family can say."

She had no patience with Mademoiselle. She preached quite a clever little sermon upon the necessity and duty of thinking of herself, and of the ingratitude not only to Providence, which had afforded this chance, and to the man who had given it, but even to the people under whose roof she was, and who had her best interests at heart, should she neglect such a means of securing her own comfort and independence. Mrs. Wargrave ended by feeling herself aggrieved. Mademoiselle's culpable sentimentality, her rejection of the best of advice, her obstinacy and wrong-headedness would, she felt sure, recoil upon herself—but in the meantime Mrs. Wargrave could not conceal that she was wounded, deeply wounded, by seeing her advice so slighted—"Though it is yourself who will be the chief sufferer, Mademoiselle," she said, with almost vindictive vehemence. And it was in this mood that she left the room, leaving, so to speak, a prophecy of doom behind her. Mademoiselle, she said, would repent but once, and that would be all her life.

Mademoiselle tried to laugh when Mrs. Wargrave was gone, but the effort was too much, and she astonished herself very much by suddenly bursting into tears instead. What for, she could not tell. It was, she supposed, a case of overstrained nerves and bodily exhaustion, for she felt herself curiously worn out. But afterward she grew more calm, and it was im-

possible for her not to go over Mrs. Wargrave's arguments, and to find in them many things which she could not gainsay. The smile that came over her face at the thought of her own little mystification, the snare which had been laid without intention, and into which her adviser had fallen so easily, was very transient; for, indeed, the oracle which she had so lightly evoked had spoken the words of truth and soberness. Claire asked herself whether, on the whole, this matter-of-fact and worldly woman was not right. Poor, solitary and, if not old, yet within sight of the possibility of growing into what was old age for a woman in her position, had she any right to reject the chance of comfort and advancement thus held out to her? Had she any right to do it? She asked herself this question so much more at her ease that she had already rejected it, and Charles Wargrave must already have accepted her decision, so that she said to herself it was only an hypothetical case she was considering. The question was, under such circumstances, a mere speculation. What should a woman do? Poverty before her on one side and wealth on the other—obscurity, helplessness, the absence of all power to succor or aid, and possibly want at the end—while with a word she could have all that a woman could desire, every possibility of helpfulness, comfort for her family, freedom for herself, the freedom from all cares and personal bondage. And it was not as if there was anything wrong involved. Mademoiselle knew herself not only to be a woman who would do her duty, but one who would have no thought beyond it or struggle against it. If she married a man she would be a good wife to him, one in whom his soul might trust. Was it necessary to reject the overture which would bring so much, because she had not that one ethereal thing—the sentiment above duty, the uncertain errant principle called Love, to justify the transaction? She asked herself the question, with all the French part of her nature and breeding urging her toward the common-sense view. Marriage meant a great deal more than mere loving. It meant the discharge of many duties which she could undertake and faithfully do. It meant a definite office in life which she knew she could fulfil. It meant fellowship, companionship, the care of joint interests, the

best advice, support, and backing up that one human being could give another. She felt, though she would not have said it, that all this she could give, far better, perhaps, than a girl could, who would be able to fancy herself in love. Ah! but then—The other side of her character turned round and cut her short in her thinking, but with an abruptness that hurt her. She gave an almost sobbing sigh of regret and something like pain.

Then another part of Mrs. Wargrave's argument came to her mind. Let his family say what they pleased, that was their concern. After all there, too, was the teaching of common sense. Mademoiselle had felt as if it would be something like treachery to live in the Wargrave's house and allow their relation to make such overtures to her. Why? The Wargraves were kind enough, good enough, but not more to her than she to them. They gave her the food and shelter and wages they had engaged to give, and she gave to them a full equivalent. They never considered her but as their children's governess. On what rule should she consider them as something more than her employers, as people to whom she owed a higher observance beyond and above her duty? Gratitude!—there was no reason for gratitude. There is a curious prejudice in favor of being grateful to the people under whose roof you live, however light may be the bond, however little the bargain may be to your advantage. Mademoiselle knew that the day she ceased to be useful to the Wargraves they would tell her so, and arrange that she should leave them, not unkindly but certainly, on the common law which exists between employers and employed. And why should she abandon any hope of improving her condition through a visionary sentiment of treachery to them? Ah! she said to herself again, but then—What was it that stopped her thoughts in both these cases? In neither was there anything wrong—no law of man, none even of God would be broken. She would wrong no one. And yet—She ended her long course of thinking with a sigh. An invisible barrier stood before her which she regretted, which was unreal, which was, perhaps, merely fantastic—a folly, not a thing to interfere with any sensible career. But there it stood.

What a good thing that the case was

merely hypothetical, everything being in reality quite fixed and decided, to be reopened no more!

## CHAPTER VII.

THAT night late there came a note by the last post—that post which sometimes adds horrors to the night in London, with missives which interfere hopelessly with the quiet of the hour. In it Charles Wargrave thanked her that she did not accept his heart carelessly, as if it were a cup of tea. He thanked her for her decided answer, but he thought she would at least understand him when he said that, so far as he was concerned, it could not stop there. Next time it would not at least be a question which she had not anticipated, and he would still hope that her prayer for his welfare might be accomplished without the condition she put upon it—with which there could be no welfare for him at all. It cannot be said that, though her heart beat at the sight of it, this letter was a great surprise to Claire. Notwithstanding her conviction that it was an hypothetical case which she was putting to herself, she felt now that she had not indeed really imagined or believed that Charles Wargrave, a man who had got his own will all his life, was now to be thwarted in so important a matter without resistance or protest. She felt at once that this was what was to be expected. The letter, however, piqued her a little—annoyed her a little. It would have been reasonable that he should have met her arguments one way or other. It would have been civil to have protested, and declared that she was not old, though she pleased to call herself so. Though Mademoiselle was herself so full of common-sense on this subject, as on most others, she had a feeling that it was a failure of politeness on the part of Charles Wargrave not to have said something about it. When she discovered this sentiment in her own spirit she was a little ashamed of it, but still it was there. And the note in general said so little that it piqued and interested her. It was skilfully done; but Mademoiselle did not see this, neither, perhaps, did the writer. Perhaps Mademoiselle was momentarily vexed, too, that there was no need to answer it. If there is one weakness which is common to human nature it is the pleasure which people

take in explaining themselves, especially on emotional subjects, so as to leave their correspondents in no doubt as to their real meaning. Claire had written very hurriedly the first time, with a genuine desire to sweep such a troublesome episode out of her life. She felt now that it would be pleasant to fill out and strengthen all these arguments, and especially to bring out that point of age of which he had taken no notice. He might, perhaps, from what she had herself said, think her forty or more, seeing that he did not object to her statement about her age; and she would have liked, while reiterating that, to have made it quite clear what her age was—not, after all, so much as he might think. But her good sense was sufficiently effective still to make her feel that no answer was needed to his letter. She put it away in the little faded desk, which, perhaps, was doing it too much honor. There the matter would end, notwithstanding what he said. He should find it impossible to get any opportunity of speech; nothing would induce her to listen to him in his cousin's house—nothing, though she had felt all the force of Mrs. Wargrave's arguments about the family. In short, it must be allowed that, in respect to the question, in this, its second phase, Claire de Castel-Sombre did not carry with her all the prudence and experience of Mademoiselle, but was sometimes in her thoughts more like a petulant girl than was at all consistent with her character of a philosopher or a mature woman of the world.

And then there occurred what can only be called a pause in life. Everything, of course, went on quite as usual; but in this particular matter there was silence in heaven and earth. Life came to a pause, like that pause in music which gives so much expectancy to what precedes it, so much emphasis and effect to what follows. It is easy to notice the advantage of a pause in music, but not so much in life, where perhaps the occurrence of an interval, whether agreeable or disagreeable, is, while it lasts, exceedingly tedious, involving many stings of disappointment and blank moments of suspense. Claire would not have allowed even to herself that she wanted the sensation, the new condition of affairs to go on, which had suddenly brought a shock of interest and novelty into her monotonous existence. But, all

the same, she suffered when it stopped. The monotony to which she had so well schooled herself seemed more monotonous than ever. A restless desire that something should happen dawned within her; not so much that another incident in this history should happen, as that something should happen—an earthquake, a great fire, even a thunderstorm if nothing more. But this desire was in vain, for nothing happened. There was a time of very brilliant yet mild weather, not even too hot, threatening nothing, and all went on in its usual routine. Mr. Charles Wargrave came occasionally to luncheon, as he had been in the habit of doing, but Mademoiselle had always the best of reasons for withdrawing immediately that the meal was over—lessons that required instant attention, or letters that had to be sent off by the afternoon post. Sometimes she caught a look from him which reproached her, or questioned her, or merely assured her, as a look can do, that he saw through her artifices, yet was not moved by them. She felt the strain upon her nerves of these meetings, which were not meetings at all, and in which no word was exchanged on any private subject; but when he was absent, and did not appear for about a fortnight, strangely enough Claire felt this still more. She said to herself, with a smile, that he was at last convinced and saw the futility of the pursuit; but though the smile ran into a laugh, there was no sense of absolute pleasure in her mind. When an exciting story stops, even when it is only a story in a book, and there are no more accidents and adventures to anticipate, it leaves a dulness behind. And Claire felt a dulness. The story of Charles Wargrave stopped. She did not want it to go on—oh! far from that, she said quickly, with a hot blush; but it left a dulness; as much as that a woman might allow.

The season was just about coming to an end, and Mrs. Leicester Wargrave's engagements were many in the rush of the final gayeties. She had gone out one afternoon, taking the little girls with her, to a garden-party, a thing which did not happen often, but when it did come was a holiday to Mademoiselle. It was the beginning of July, still and warm, and Claire went out with her work to the garden, to a shady corner in which she could be quiet and undisturbed. She had no fear of any interruption: a visitor for herself

was the rarest possible occurrence (for people naturally do not like the governess's visitors about, who might be mistaken for visitors of the house), and none of Mrs. Wargrave's visitors were likely to penetrate to the garden, the mistress of the house being absent. Claire had brought out her mending, which was her chief work in her brief moments of solitude. It was in a trim little covered basket, not to offend anybody's eye; and, as a matter of fact, she did more thinking than sewing. The happiness of thinking is when you think about nothing in particular, thinking without an object; and the sense of unusual leisure and quiet, and the soft influences of the air outdoors—which she could enjoy without any anxiety as to Edith exposing herself to the sun, or Dorothy running too fast—had filled Claire's mind with the soft atmosphere of musing without definite thoughts. Stray fancies went flitting through her mind like the little white clouds upon the sky. She was Claire de Castel-Sombre through and through, she was not Mademoiselle at all. She had forgotten to remember about Charles Wargrave, and the story which had come to a pause.

For once in a way to have got rid of all that, and then to lift your eyes quickly at the sound of a step on the gravel, and to see him, walking out quietly from under the shadow of the trees! Her heart gave a leap as if it had somehow got loose, but she rose to meet him with a countenance which was no longer that of Claire de Castel-Sombre, but the well-trained face of Mademoiselle.

"I am sorry," she said, "Mrs. Wargrave and the children are gone out. There is a garden-party at the Merewethers'."

"I know," he said, "and hoped to find you alone."

"They were kind enough to ask me too," said Mademoiselle.

"I am very glad you did not go; I have been watching for this opportunity so long! I suppose you don't think what it is, to see you across the table, and never have a chance of a word?"

"Monsieur Wargrave," said Mademoiselle, "might avoid that by coming—to dinner, for example, when I am not there."

"It is malice that makes you say so," he replied. She had changed into French

and he followed her lead. "You know the purpose for which I come. No, I cannot consent to lose my small opportunity, my holiday from observation, by not speaking of what is nearest my heart."

"Monsieur does not care, then, for spoiling mine?"

"Ah!" he said, "Mademoiselle de Castel-Sombre, you think you can silence me with that. So you can. If it is, indeed, to take anything from you, to spoil your quiet, of course there cannot be any question on the subject, and I will go away."

Thus it would have been easy to finish the conversation. No doubt it would have been rude—and to be rude was very abhorrent to all Mademoiselle's notions—still, on such an important issue, and to secure that he should go away! But Mademoiselle evidently would rather suffer than be so impolite, for she answered not a word.

"I must take advantage when I can," he said, "or otherwise how am I to make myself known to you—how prepare the way? I will talk on any subject you please. I have not come here to worry you, to press myself upon you like an ice or a cup of tea. How I thank you for that simile! I do not want you to take me, when you take me, as if I were a cup of tea."

Mademoiselle once more was silent. If she had combatted the assumption of that *when*, it might have reopened the whole discussion, she said to herself.

"There are certain mistakes about myself I should like to correct," he said. "You seem to have thought I was twenty or twenty-five, and I am thirty-four. It is not of much importance, but I should like you to know it. I wonder Mrs. Wargrave, who knows everybody's age, did not inform you of that."

"She does not care about the ages of men," said Mademoiselle with an effort. Like many other people, when there was a desperate occasion for keeping up the conversation, she plunged into sarcasm as the easiest way. "To keep women from going wrong about their age is what she wishes. You know we are sometimes accused of taking off a year or two."

"Unless when you add a year or two," he said. She had ventured on a glance upward at him over her work, and he caught the glance, being on the watch,

and made a point on his own side by that which replied to it. "I suppose both have their uses," he added, "to attract or to repel."

"If you think," said Mademoiselle hastily, "that all women think of is either to attract or repel—! But even were it so, it is but a small number of women who are within that circle. In youth it may be the object of too many thoughts, but when a woman is in the midst of life, do her thoughts dwell on such arts more than a man's? No, Mr. Wargrave, it is not just to say so."

"Mademoiselle de Castel-Sombre," he said with great gravity, pronouncing every syllable, till she smiled at the formality in spite of herself, "I am not superior to such arts, if I knew how to use them. And, man or woman, I think the desire to please is of itself a great charm."

"It must be kept within bounds," she said vaguely, scarcely knowing what it was she said.

"There would be no bounds in mine if I had the luck to succeed," he said, "or even the hope of succeeding." Then he stopped himself with a little abruptness, and there was a silence during which the birds came in singing, and the leaves rustling in a curious little interlude which Mademoiselle never forgot. At last he said: "The opportunity of speaking with you alone goes to my head. And I run the risk of wearying you, I know, of pressing prematurely. I wish you would tell me—anything you would like me to do."

"Yes," she said, suddenly putting down her work and looking up at him. She saw against the trees, for a moment, his head bent forward, his look of profound pleasure, the expectation in his face. "If you wish to please me," she said, "you will go away."

It was cruel, and she felt it to be cruel; an insult flung full in his face when he looked for it so little. He sprang suddenly to his feet as if he had been shot. His countenance changed. Mademoiselle bent her head again, not to see what she had done.

"Mademoiselle!" he cried, with a pang in his voice, then composing himself. "If that is really what you wish—if it is the only thing I can do for you, to relieve you of my presence—"

"Forgive me!" said Mademoiselle,

very low. She added more distinctly: "Monsieur Wargrave will see that here, in the home of his family, who would resent it so much, is the last place in the world—"

"Confound my family!" he cried, then begged her pardon hastily; "they are not my family—a cousin, to whom I am no more responsible than to his gardener."

"But I am responsible," she said. "She is my—mistress. Ah! whatever glosses we put upon it, that is the case. I will not be dishonorable to listen to what would enrage her and shock her, here."

"Then I may speak—elsewhere?" he said eagerly.

"There is no elsewhere; we are here. It is the only place where we meet. Monsieur Wargrave must not take advantage of what I say. There is but one good thing and true that can be done."

"And that is to leave you?" he said despondently. "Mademoiselle, it is yours to command and mine to obey—but it is cruel. Surely at the most, with all your delicacies and precautions, you cannot think a man's honest love, and wish to commend himself to her, is any shame to a woman?"

"Not if she were a queen!" Claire could not have said otherwise had she died for it; but she did die, or rather put herself to death, and Mademoiselle came back to her place. "But there are times and seasons, and there are places in which what was honorable becomes profane. If Monsieur Wargrave will put himself in my place, instead of thinking of his own."

Mademoiselle did not know whether she was most elated or depressed by her victory. When he had left the garden she hurried indoors, feeling that all the peacefulness of her previous mood was gone. The afternoon quiet had been sweet to her, but it was so no more, and all that had made her position endurable seemed to have gone with it. Why should the life, which she had so carefully shaped into the limitations in which she believed it must be bound forever, be thus disturbed? She thought with almost resentment that it was for a caprice, for a little additional pleasure to a man who had all the pleasures of life at his command, that this had been done, and that he had thought of himself, and not of her, when he thus took in hand the unsettling of all her views, the

disturbance of every plan. It would have been little had he been satisfied with her first reply, had he left her to herself when he saw that there was no response in her to his proposition; but to continue to push on, in spite of her prohibition! She went in angry in her annoyance and trouble, for it was now no use to say to herself, as she had done at first, that it was nothing, a passing folly, to-morrow to be numbered among the follies of the past. Now she knew very well that her life had been disturbed, that the interruption was not a nothing; that the calm had been broken up, and all her rules displaced. And all this by no doing of hers, at the caprice of a young man, who wanted for nothing, to whom, perhaps, it was but one of many diversions! She was very indignant with him as she gained the refuge of her room; but milder thoughts came in, relentings, a curious rueful sense of the interest and variety which he had brought into her monotonous life. She had been contented after a sort. She had fully adapted herself to her fate, and learned to think it not an ill fate, better than so many. But now! And yet there had been a certain pleasure in the disturbance all the same.

Mademoiselle did not see Mrs. Wargrave till next day, when she asked to speak to her, and to that lady's great astonishment put forward a request for a holiday—leave to go to Paris to see her mother, who was ailing and wanted her. Mrs. Wargrave grew pale with astonishment and dismay. "A holiday, Mademoiselle! to go to Paris! You could not have chosen a more inconvenient time. You know we shall be going to the country in about a month, and how do you suppose I can take the charge of the children, with all I have to do!"

"I will come back before that time," said Mademoiselle.

"Then it is now directly you want to go? But that is worse and worse, for I have numbers of engagements; and what is to happen to the girls if you are away?"

"I am very sorry," said Mademoiselle, "but my mother—"

"Your mother cannot be more important to you than my children are to me. And you must recollect you have not yet been two years with us, Mademoiselle. I don't expect any governess to ask for a holiday till after the second year."

"I am very sorry," said Mademoiselle again; "but it is very important for me to go away. I—am not well: I must go—I cannot continue now. It is *plus forte que moi*."

"Mademoiselle! it is not your mother, it is this business about your marriage."

"Not my marriage; I shall never marry."

"Oh, nonsense, nonsense!" cried Mrs. Wargrave. "I am sure you want to have him all the time. It will be too ridiculous if for a set of foolish romantic scruples you go and throw a good match away."

Mademoiselle made no reply. She stood uneasily moving from one foot to another, clasping and unclasping her hands. "I must. I must get away," she said quietly, almost under her breath. "It must come to an end. I can do no good while I am kept in agitation. Ah, Mrs. Wargrave, let me go."

"I wish you would be frank and tell me who he is," said Mrs. Wargrave. "I wish you would let me speak to him. Going away is the very last thing you ought to do. To throw away a good match at your age, and with your prospects! I told you before it was criminal, Mademoiselle."

Mademoiselle said something under her breath, in her agitation, which sounded like "You do not know," and Mrs. Wargrave grew angry. "I don't know? Who knows, then, I wonder? I tell you that for you, in your position, with your mother to think of, it is simple wickedness. If the man were an ogre I'd marry him if I were in your position. Goodness, what have you to do with his family? You make me so impatient I could shake you. You should marry him, whoever he is, if he can give you a good home."

"If Madame Wargrave could but spare me for a month—for three weeks!"

"I am sure it's not for your own good. You should be proud to stay and marry him, for your own good. Mademoiselle! I tell you, whoever he is, if he were an ogre—"

Mademoiselle suddenly laid her hand upon the arm of her patroness. There was a gleam of desperation in her eyes. "You would not say so were I to tell you his name."

"I would say so, whatever is his name, for your own good. What is his name?"

They stood looking at each other for a

moment, both of them excited, Mrs. Wargrave full of curiosity, and Claire carried away by the passion of the moment, feeling it the only way to clear herself, to throw off the shadow of double-dealing which she felt upon her; but the crisis was a desperate one, and calmed her in spite of herself. She took her hand from the other's arm. "It is Mr. Charles Wargrave," she said.

Mrs. Wargrave received the shock in all its force, being wholly unprepared for it. She was so startled that her sudden movement shook the very walls. "Mr. Charles Wargrave?" she repeated, with a voice of horror. "It can't—it can't be true! Is it true?"

To this question Mademoiselle did not answer a word.

"Charles Wargrave!" repeated the lady, with a mixture of consternation and incredulity. "And you're not ashamed to tell me that?" she cried. "You can stand and look me in the face?"

Claire had not looked her in the face, but at these words she raised her head and met Mrs. Wargrave's angry eyes. She was pale, but she did not flinch. Now it was all over, she knew. This house, which might have been more or less hers for five years, the salary which had helped to maintain her mother, the freedom from care for so long,—all was over! When she went out of these doors it would be to face the world again, to find another means of subsistence, to begin anew.

Mrs. Wargrave turned and left the room, and Mademoiselle saw nothing of her till next day, when in the morning, before the lessons had begun, she was summoned downstairs. To her surprise she found Mr. Leicester Wargrave, as well as his wife, awaiting her in the room which they called the library. He was seated at the writing-table with some papers before him, she standing beside him. With some ceremony a chair was placed for her, and she was asked to sit down. "We will not detain you long, Mademoiselle," Mr. Wargrave said, clearing his throat, and Mrs. Wargrave, too, coughed and cleared hers before she began.

"Mademoiselle, you will not wonder that I thought it right to consult my husband about what you said last night. He thinks you must have made a mistake. His cousin is not at all that kind of man."

Claire's countenance lighted up with

sudden indignation. "I have made no mistake," she said.

"Ladies are apt to think, when a young man is just amusing himself, that he means something. Anyhow, of course we can't pass it over."

"Pass it over!"

"I mean—that we think your going to Paris a very good plan; and perhaps, if you could find something there that would suit you, it would be better for you—to be within reach of your mother."

"You mean that I am not wanted here again?"

"It is not so decided as that. I'm sure we're both very sorry that any unpleasantness should have arisen, and both Mr. Wargrave and I think you have behaved very well, Mademoiselle. You have nothing to reproach yourself with, and we'll be delighted to answer any inquiries. But, on the whole, I think, if you could find something in Paris, or thereabouts—where you could be nearer your mother—I do think you would find it—a relief to your mind."

"You are, no doubt, right, Mrs. Wargrave," said Mademoiselle, rising from her chair.

"Yes, I'm sure I'm right: and Mr. Wargrave has written a check—for the difference, you know. And if you would like Sarah to help you with your boxes—we thought you might, perhaps, like to go by the night train."

#### CHAPTER VIII.

It is needless to add that Claire did not say a word in remonstrance or objection. She was startled and unprepared for such summary measures. And yet she said to herself that she had fully expected it, and was not surprised that her employer should take energetic measures to stop such a *mésalliance*. A *mésalliance*! But she reflected with her usual philosophy that it would be so, that her *beau nom* meant nothing, less even in her own country than here. If she had been a man who could confer that *beau nom* in return for some romantic nobody's money, then perhaps there might have been some value in it; but to her, a woman, an old maid, a governess! She was far too proud to ask for an hour's delay, even for so much as would enable her to travel by day instead of by night; yet there was no doubt that

it was with a very strange sensation that she felt herself dismissed from the recognized place in which yesterday she had expected to remain for years, and facing once more a blank world, in which she knew not where to go, or what her next standing-point might be. It is true that she was in no way destitute or without a refuge. She had her mother's house to go to, the little shabby apartment in Paris, where she could scarcely hope to be triumphantly received, seeing that her return meant a diminution of its slender resources, besides the inference which old Aunt Clotilde at least would be so ready to draw, that Claire had left her good situation in disgrace. This suggestion made her blood boil, and it was one which was inevitable. But still there was nothing hopeless or even terrible in her position. She was sufficiently well known in the circles where people of her class are known to have little fear of finding another situation. And she had already known so many new beginnings that another did not appall her. No, there was nothing desperate, nothing tragical in her circumstances. A little additional humiliation, a shock, perhaps a reproach, but no more. And perhaps it was the best thing that could have happened. It put a stop summarily to an episode that never would have come to anything, which was well; surely from any point of view it was well. When she found herself on the Channel, looking somewhat wistfully at the clear sky overhead, full of the softness of the summer stars, and at the dim whiteness of the cliffs she was leaving behind, it is possible that Claire saw them blurred yet amplified through the medium of a tear. In front of her the other coast was lost in the distance and darkness of night, so that while what was past was still clear, what was future was wholly invisible, which was a perfect symbol of life itself. She noted the similitude with that love of imagery which is natural to a soul in trouble, with forlorn interest. How little she had expected last night to be crossing the Channel thus! how suddenly her existence had changed!

But these are vicissitudes which must occur in the life of a governess, for whom more than for most human creatures there is no continuing city; and by the time Mademoiselle had left behind her that dark and mystic interval of the Channel, with all its suggestions, she had begun to

be able to indulge in a rueful smile at the transformation scene which had been played for her (doubtful) amusement in her late home in the Square. Mrs. Wargrave's indignation at her fastidious and romantic objection to marry a man who could make a provision for her turned in a moment into swift horror and alarm lest such a catastrophe should occur, and the acknowledgment that Mademoiselle had "behaved very well" in the reluctance which half an hour before she had denounced as folly! Claire had known how it would be from the first, and it was an amusing exhibition of human inconsistency. But yet she was not so much amused after all. Exhibitions of this kind, perhaps, fail of their effect when they are too closely connected with ourselves. The spectator must not be too much involved in them if he would retain his power to smile.

When Charles Wargrave next appeared at the Square he was greeted by his two small cousins with rapture. They had great news to tell him. Mademoiselle had gone away. "Oh, Uncle Charles, only think what has happened!" The information was so unexpected that he was off his guard, and his consternation was evident. "Mademoiselle de Castel-Sombre!" he said in tones of dismay. Mrs. Wargrave kept her countenance very well, and maintained a close watch upon him under her eyelids, without betraying herself, but Leicester Wargrave, who was at home, as it was Sunday, was exceedingly uneasy, and hewed away at the roast mutton before him, though everybody had been helped, to conceal the agitation he felt.

"Oh, you know her name! It is such a funny name, like a name in a novel. I never could keep it in mind; but, of course, to introduce her to any one, in her position, it was enough to say Mademoiselle."

"Do you think so? It is scarcely like your usual good breeding," said Charles, concealing his agitation too as best he could under a tone of high and somewhat acrid superiority. "And perhaps you don't know that Castel-Sombre is an historical name, and one of the best in Béarn—which makes a difference."

"Oh, if you go so far as that," said Mrs. Wargrave with a slight quaver in her voice. She did not resent what he said; indeed, she felt very humble before him

and deprecated any argument. "We did not know, of course, when she came that she was any one—in particular. I mean, any one out of the ordinary."

"And has it been long settled that she was to go away?" said Charles Wargrave in his most formal voice, addressing his cousin grandly from an eminence: which he had a right to do, as at once a man of fashion and the principal partner in the firm—a right, however, which he very seldom exercised.

"Oh, it was only on Friday," cried Edith; "she never said a word till then."

"And she went away the same night, oh! in such a hurry," added Dorothy, breathless to bring forth her part of the news before she could be frustrated. "She went by the night train."

"After she had that talk in the morning, mother, with you and papa in the library," Edith burst in.

"Yes, poor thing!" said Mrs. Wargrave. "She had told me on Monday night her mother was ill; and, of course, in the circumstances I spoke to Leicester, and we did what we could to make it easier for her." Leicester paused in his destruction of the leg of mutton at this speech and gave his wife an astonished look; but Charles was too much preoccupied to note these signs of excitement, and he had to defend himself from observation at the same time.

"That was kind of you," he said, though with a certain haughtiness. He was angry that they should have given her aid, that she should have accepted it; but this was a sentiment impossible to express. "Then I suppose you little ones have holidays now, and no lessons?" he said, attempting a lighter tone.

"Only till the new governess comes," said Edith; "and oh! mother went out that very day to ask about another," cried Dorothy in an aggrieved tone.

"Oh!" he said; "then Mademoiselle de Castel Sombre is not coming back?"

"She is so anxious about her mother," said Mrs. Wargrave, "we thought, that is, she made up her mind, that it would be better to look for something in Paris, that she might be near her mother. You know," added the lady, seeing a chance of administering a return blow, "her mother must be quite an old lady, for Mademoiselle herself is far from young."

Charles Wargrave gave her a keen look.

But the pudding had been placed before her, and she was busy serving it, an occupation quite inconsistent, surely, with any unkind meaning. Leicester was a great deal more likely to betray himself, and was indeed very uneasy, looking and feeling very guilty, wondering how his wife should be able to tell such lies, yet not venturing to contradict her; for he had been as strong as she was on the necessity of parting Charlie (if he was really such a fool) from Mademoiselle.

Little more, however, was said. Charles was so much confused by this sudden catastrophe that it took him some time to collect his thoughts. And he felt it quite possible that Claire might have fled from him, and not by any means the worst omen for his success. If she had fled it was that she was afraid of yielding. His heart rose as he reflected that by going home she had freed herself from all hindrance to their intercourse; that he might go and see her without having to watch for an opportunity; that he might gain partisans in her family, make himself friends. These reflections cleared his brow, and made this alarming explanation, which had hung like a thunder-cloud over Mrs. Leicester Wargrave, pass over with more ease than could have been hoped. The pair exchanged a look of congratulation as they rose from the table. The danger for the moment was past, or so at least they thought.

"By the way," said Charles, when his cousin and he strolled out into the garden to smoke the inevitable cigarette, "I suppose you can give me Mademoiselle de Castel-Sombre's address in Paris?" He took his cigarette from his mouth and blew away a long pennon of smoke, as if it had been the most simple question in the world.

"Mademoiselle's address!" said Leicester Wargrave, with open eyes and mouth.

"Yes. I've—I've got a book of hers which I should like to send back."

"You'd better send it to my wife," said Leicester. "Women have ways of managing these things. You had much better send it to my wife."

"Women have ways! One would think it was some mystery you were talking of."

"I say, Charlie, I'm older than you are, and I've seen more of the world. Don't you go after that Frenchwoman."

They're not to be trusted. Marry if you like, but marry an English—"

"What are you talking of?" cried Charles, red with wonder and wrath.

"Well, I don't know. Perhaps it's only the silly way women have of looking at a thing. They said, you know—but I don't generally mind them for my part."

"I should like very much to know what they said."

Mrs. Wargrave was seized with a panic when she saw the two gentlemen together. She had no confidence in her husband. "He will go and spoil everything," she said to herself; and the consequence was that she hurried out to join them, arriving just at this critical point in the conversation. "What who said?" she asked lightly. "I believe you are talking gossip, you two."

"Leicester tells me that somebody, whom he calls the women, have been talking—apparently about me. I want to know what they said."

"You are a pair of regular old gossips," said the lady, though she grew a little pale. "They said, and he said, and she said! You need not be afraid, dear Charlie; nobody says any harm of you."

"It is to be hoped so," he replied shortly. "Perhaps you will tell me, Marian, the address of Mademoiselle de Castel-Sombre in Paris; Leicester does not seem to know."

"Mademoiselle's address!" cried Mrs. Leicester, startled like her husband.

"Is there anything so wonderful in my question? I may have something to send her. I may know some one who wants—her help."

"Dear Charlie," said Mrs. Wargrave, "I know you'll think it strange when I tell you—just as if she had something to conceal!—she left no address."

He turned upon his cousin, who was gazing at his wife, and caught him unawares. Seizing his arm: "Is that true?" he said.

"Charlie, don't!" said Leicester Wargrave. "My good fellow, don't do it. You'll never repent it but once, and that will be all your life."

"What does he mean?" said Charles, turning from the husband to the wife.

"How can I tell what he means?" cried that lady. "You are very uncivil to ask him if what I say is true. It is perfectly true. He may talk as much non-

sense as he pleases, but it is the plain fact that I don't know Mademoiselle's address."

Charles Wargrave looked her in the face sternly. "I do not believe you!" he said, as if every word had been a stone; and, flinging his cigarette among the bushes, he turned round and left the garden and the house. It startled him a little as he went out to receive the same answer from the butler, to whom he repeated his question. "The young lady, sir, went off in a great hurry. I asked her where I should send her letters, but she said she expected no letters. And she went off without leaving an address."

Was it a conspiracy against him, framed by her? or was it some interference of Marian's? or was it true, which would almost be worst of all?

It is a bad thing not to leave an address, but it is not such an effectual shield of privacy as might be wished. What with directories and other aids, it is very difficult for any one who does not belong to the hopelessly nomadic portion of the population to conceal their whereabouts for long. Charles Wargrave had all his wits about him, and he knew his Paris as well as foreigners ever succeed in knowing that wonderful city. The result of his investigations was that before a fortnight had passed he knocked at a door on the second floor of a house in one of the smaller streets near the Arc de Triomphe, and asked to see Madame Castel. He was shown into a tiny salon, looking out upon a narrow court; a little room full of traces of a larger life, which did not make it more attractive now, with furniture too large, pictures which seemed to overshadow its small dimensions like clouds—relics evidently of a time when the family life was not pinched and restrained as now. A photograph of Claire was on the mantelpiece among other household treasures, at sight of which the visitor gave an exclamation of relief: for, though he had come in so boldly, he had been quite uncertain whether this was or was not the place he was seeking. He was standing before the little picture which had given him the welcome assurance that he was right, when the door opened and an old lady came in. She was, as Mrs. Leicester Wargrave had suggested, quite an old lady, with a cap made of black lace covering her rusty gray hair. Keen curiosity and an almost hunger of earnestness were in her blue eyes,

which kept their color and brightness, though the countenance was so faded. She had the air of one who had kept asking, "What is it? what is it?" for weary and unsatisfied years. She was dressed with that curious neglect which characterizes so many Frenchwomen indoors, in garments indescribably dingy, of the color of poverty, a well-ascertained and understood hue—the same, with variations, which was visible in the carpets and curtains and all the old furniture—but had so much intelligence in her face that her age and shabbiness had nothing in them that was disagreeable. Charles Wargrave made her his bow, like an Englishman, not like a Frenchman, and the old lady, though her nationality had been partly washed out by long acquaintance with Parisian shabbiness and mannerisms and formality, the reverse of the medal of which the brighter side only is visible to visitors, noted the difference with a favorable impression. There was a certain witchlike ruggedness in her features and look which betrayed the old Scotch stock, never uncongenial with the French, from which she sprang.

"You have a daughter, Madame," said Wargrave, who felt as shy as a schoolboy before the keen old lady, who measured him from head to foot with her penetrating eyes.

"Two," she replied quickly. "That is Claire, at which you are looking; and that is Léonore, who is away, who is in a situation. My eldest daughter came home about a fortnight ago. She has gone out to see some people who put an advertisement in 'Galignani.' Perhaps you wish to see her—about an engagement?"

"That is exactly what I wish," said Wargrave, with an uneasy smile.

"Ah! will you take a seat? She may come back at any moment; and if I could in the meantime give you any particulars—"

"Madame de Castel-Sombre—"

"No, no," said the old lady, putting away the double-barrelled name, as it were, with a wave of her hand. "Plain Castel, if you please; that is enough for us now."

"Madame," repeated Charles Wargrave, "it is not the kind of engagement you think of, which I wish to propose to Mademoiselle Claire."

"Ah!" cried the mother with a sudden start; "is it, well—what is it? I

may misunderstand you. Please to speak plainly. You are—!" She gave a quick glance at his card, which she held in her hand. "It is the same name as Claire's employers in London. Perhaps I am making a mistake. Is she called back?"

"The people in London are my relations. I saw your daughter there; you will not wonder, perhaps, that I admired her, that I did all I could to make myself known to her—that I loved her."

He made a pause, feeling his story somewhat embarrassing to tell under the close inspection of the mother's eyes.

"No," she said, after a moment's pause, "I am not surprised. I have always thought Claire a very interesting woman; but, pardon me, I should have thought her a little too old for you."

"What does that matter?" he cried, vehemently angry to have this objection produced against him from the last quarter in the world where it could have been expected.

"Well, nothing, if you don't think so," said this reasonable old lady. "I only mentioned it as a fact, you know. I am afraid it will weigh with Claire herself."

"Madame Castel, I have come to throw myself upon your protection. Would it not be better for Claire to be the mistress of her own house, and that a good one, to have her own life, and that a prosperous one, even though weighted with a husband, than to live and work as she is doing now?"

"Perhaps I should think the husband the best part of it," said Madame Castel. "Your appeal is a little bewildering, seeing that I never saw you before; but I agree with you, if it is as you say. My protection, however, is not of much importance. What would you have me to do?"

"Mademoiselle de Castel-Sombre is French, and in France a mother's power is supreme."

"Ah!" said the old lady, shaking her head, "don't flatter yourself. A mother's power is seldom supreme over a daughter of thirty-five; and," she added, "I would gladly secure these good things for my Claire; but she is more able to judge than I am. Does she know?"

"I have done all I could to make her aware of my respectful devotion," said the young man, with a certain formality

which came to him in the air of the unaccustomed foreign place, "but, indeed, I have no reason to flatter myself. My hope is that the objections which she thought valid in my cousin's house might not exist here."

"Ah, it was in your cousin's house. Then that explains—" Madame Castelsaid. She gave a sigh of relief. "I had been fearing something, I know not what. She came so suddenly, without any warning but a telegram. I see it now."

"Mother, what is it you see now?"

Claire came into the room, bringing the air of the morning with her, a fresh waft of outdoor atmosphere. She was not the Mademoiselle of the Square. There was a freedom in her movements—the freedom of a woman at home, not the enforced sobriety of an official. Her look was alert and bright; she had found pleasure in her native air, in the surroundings she loved: and yet there was a line of anxiety in her forehead. She was emancipated for the moment, and keenly felt the warm thrill of independence; but she was anxious for her future, and that of her mother, and full of care. Pleased, yet anxious and full of care—it seemed a contradiction in words—and yet Charles Wargrave saw all that, and read more, written in her face. She had not seen him as he sat within the shadow of the door, and, he thought, he had never seen her before, free to express any emotion, free to come and go as she pleased, carrying her heart in her face.

"I have not been successful," she said. "Never mind; better luck will come to-morrow. They say I am quite sure to hear of something before— Mr. Wargrave!" she cried, with a sudden step back. The blood rushed to her face and then forsook it. Her brow clouded, her countenance fell.

"Yes, Mademoiselle Claire." He had risen to his feet, and stood before her with a painful, whimsical consciousness that he could not bow like a Frenchman, which, perhaps, was the sort of thing to please her, shooting through his mind even in the excitement of the moment, and all the eager rush of feeling roused by seeing her again in this new phase.

Claire was too much startled to know what she was saying. A flood of strange

feelings seemed to carry her away. Her head, which she had carried with such airy grace, drooped; something seemed to dazzle her eyes. "I did not expect," she said, faltering, "to see you here."

"I have come—to seek the protection of your mother," he said. It was said in English, but the meaning was French. And there was something so strange in the idea of Madame Castel's protection—the shabby eager old lady—extended to this young man, who had everything that life could bestow, that Claire, after a hard effort to restrain herself, and with something hysterical climbing in her throat, suddenly broke the embarrassment of the situation by the most inappropriate thing in the world—a burst of unsteady laughter, which returned again and again, and would not be quieted. "My mother's protection!"

It was the ridiculous which follows so close upon the heels of the sublime. But though she laughed, Claire foresaw how it would be: Madame Castel's protection threw such a weight into the scales on Charles Wargrave's side that there was scarcely anything more to say. He was not sent away again. He remained and found the little shabby apartment divine. It was his turn to laugh when they compared notes and found that even the obstacle of age meant nothing more than a few days. And thus this little drama, so exciting while it lasted, came to a speedy and satisfactory end. It is the penalty of a happy *dénouement* that it is not half so interesting as the painful steps that sometimes lead to it; and Claire, in all the brilliancy of her late but perfect good fortune, was too happy to mind or to attract that sympathy which attended Mademoiselle.

The Leicester Wargraves found it a bitter experience when Mademoiselle returned as Madame, with a finer house, finer carriages, more social honors than themselves. They said everything which she had herself predicted to Mrs. Wargrave that they would say, calling her a designing woman, an artful adventuress, and half-a-dozen slanders more. But if anybody was harmed by their proceedings it was themselves, and not Claire. —*Cornhill Magazine*.

## WHAT TO DO WITH OUR OLD PEOPLE.

BY F. MAX MÜLLER.

THOUGH the ideal of human life, as represented to us in the literature of ancient nations, may often have been very far from being realized, yet in one sense even the conception of an ideal is a reality that ought to count in our estimate of a nation's character. It may be said of some of the noblest characters that they must be judged not so much by what they achieved as by what they strove to achieve, and what holds good of individuals holds good of nations also. *In magnis et voluisse sat est.* When we read the account which the laws of the Mānavas, or, as they are commonly called, the Laws of Manu, give us of social life in ancient India, or when we check these statements by the earlier accounts which we find in the Sūtras and the Brāhmanas, we are inclined at first to look upon the picture of early Indian society as a mere Utopia. Nor can it be denied that the laws of the Mānavas tell us rather what, according to the ideas of an orthodox Brahman, the world ought to be, than what it ever could have been. We must hope on one side that the privileges of the priestly caste could never have been so excessive, nay, so outrageous, as they are represented in that code. Nor can we believe, on the other side, that the large majority of the inhabitants of India ever took so unselfish and so elevated a view of life as is preached by their legislators.

Still, even a Utopia is never entirely air-drawn, and in its general outlines the social life of India, as described by its law-givers, must have had some real foundation. In judging of what was possible and impossible, we must not forget that many things were possible in the climate of that country which would be simply absurd in more northern latitudes. In a country where even now an agricultural laborer can live on five shillings a month; where he can build his hut from the mud of the field, or live in the open air during a great part of the year; where his clothing costs hardly anything; where a handful of rice is enough to assuage hunger, while butter and sugar are counted as delicacies—in such a country a kind of village-life is possible which involves no more trying

efforts than are necessary for a healthful exercise of the body.

If, therefore, we want to understand Manu's ideal of social life, we must not think of London—not even of Calcutta, or Bombay, or Simla—but of the villages which still hold nine-tenths of the population of India. And we must try to realize a time when there existed no railways, few high-roads, few bridges, and when the horizon of their village was to millions of human beings the horizon of their world. Dynasties might come and go, religions might spring up and wither, but the life in these happy villages would go on for generations unconscious of the storms that raged in the camps of powerful conquerors or in the temples of ambitious priests.

Life in those village-communities consisted, according to Manu, of four *Asramas*, or stations. Every boy, not only of the first, but of the second and third castes also, was to begin his school-life between his seventh and, at the latest, his eleventh year. The pupil had to live in the house of his teacher, and perform services which seem to us menial, but which in India were looked upon as honorable. He had to keep the fires on the hearths or the altars burning, clean the floor, attend to the cattle, collect firewood, and walk daily through the village to collect gifts for his teacher. Morning and evening he had to say his prayers, and then to receive from his teacher all necessary instruction. This instruction consisted chiefly in learning by heart. Writing is never mentioned. The whole method of teaching is carefully described, how every day the pupil had to learn a few lines, and to repeat them with the greatest care, distinguishing long and short vowels, acute and grave syllables, surd and sonant consonants and all the rest. By going on day after day, the memory of the pupil was strengthened to such a degree that the whole of their sacred literature, instead of being handed down in writing, was handed down by oral tradition with the utmost accuracy from generation to generation, and, to a certain extent, is so handed down to the present day.

The time assigned to education and

study varied from twelve to forty-eight years. Twenty, therefore, was the earliest time when a young man might take his degree, become a *Snātaka*, or M.A., and think of entering on the second station in life—that of a married man and householder. This is a lesson to be taken to heart by those who imagine that early marriages, or child-sacrifices, are in accordance with the spirit of the ancient laws of India.

When returned to his home (*samāvritta*), the young man had to find a wife, and become a *Grihastha*, or householder. During that second period of life he had to perform all the duties of a husband and a father, offer a number of obligatory and optional sacrifices, continue his study of the *Vēda*, and, if a Brahman, be ready to teach. When, however, his children were grown up and had themselves children, when his hair had turned gray and his skin had become wrinkled, the householder ought to know that the time had come for leaving his house and all its cares, and retiring from the village into the forest. This seems to us a great wrench, and a sacrifice difficult to bear. It could, however, hardly have been so in India. Life in the forest there was a kind of *villeggiatura*. Property being almost entirely family-property, the father simply gave up to his sons what he himself no longer required. When he withdrew from the village, he became released from many duties. He was allowed to take his wife with him, and his friends and relations were allowed to see him in his sylvan retreat. He was then called a *Vānaprastha*, a dweller in the forest, and, released from the duties of a householder, from sacrificial and other ceremonial obligations, he was encouraged to meditate on the great problems of life, to rise above the outward forms of religion, and to free himself more and more from all the fetters which once bound him to this life. Even religion, in the usual sense of the word, was no longer binding on him. He was above religion, above sacred books, above sacrifices, above a belief in many gods. With the help of the mystical doctrines contained in the *Upanishads*, he was led to discover the Infinite hidden in the Finite, the True behind the semblances of the senses, the Self behind the Ego, and the indestructible identity of his own true Self with the Supreme Self. During all that time he might

be visited, he might be consulted, he certainly continued to be loved and revered by his friends. But when at last life and all its interests ceased to have any attraction, when he lived already more in the next world than in this, then the time came, for members of the first caste at least, to bid farewell to all, to leave the forest-abode near the village, and to enter on the final *Āsrama*, that of *Samnyāsi*. *Samnyāsi* means a man who has divested himself of everything, who is free from all fetters, not only from the too great love of things, but also from the too great love of friends and relations. That last stage could not have lasted long. It was simply a preparation for death, which could not tarry much before it released the wanderer (*parivrajaka*) from his last enemy, and restored him to that bliss of which this life had so long deprived him.

This is, no doubt, an ideal scheme of life, and it is difficult for us to believe that it should ever have been realized in all its fulness. The first and second stages in the life of man are natural enough, and exist more or less in every well-organized society. It is the third stage, the withdrawal from active life, the retirement into the forest, and, more particularly, the surrender of all claim on the family property, that seems to us hardly credible. We receive, however, from an unexpected quarter, a confirmation that this retirement into the forest was at one time a reality in India. The companions of Alexander were so much impressed with the number of people who led this forest-life away from towns and villages that they invented a new word, and translated the Sanskrit *vānaprastha* by *ὠλοῖστοι*, dwellers in the forest.

How pleasant such a life must have been in the Indian climate we may gather from the fact that we never hear of any force being used to drive old people away from their home into the forest. It is very important also to observe that while the periods of studentship and of household-life are fixed within narrow limits by legal authority, the time for embracing the life of a hermit is far less accurately defined, so as to leave a considerable latitude to individual choice.

What strikes us as the most cruel feature in the Indian scheme of life is the fourth period, when old people, incapable of taking care of themselves, seem to have

been entirely deprived of the loving attentions of their children, so that they must necessarily have fallen a prey to hunger or to wild animals. It is curious that this fourth stage is a privilege which the Brahmans claimed exclusively for themselves.

The Indians, however, are by no means the only people who seem to us to have been guilty of cruelty toward old people and toward children. In a primitive state of society there existed difficulties of which we have no idea. When the struggle of life became extreme, and when it was utterly impossible for a community to support more than a given number of lives, it was necessarily left to the parents to determine what children should be allowed to live or be destroyed. Among Greeks and Romans vestiges of this ancient custom may be discovered,\* and among the Germans, also, the right of the father to decide on the life of a child, by raising it from the place where the mother had given birth to it, was long maintained.† The Brahmans seem to have conceded to the father the right to expose his children, or, at all events, his female progeny.‡

But if in an early state of society children became sometimes a burden impossible to bear, a still greater difficulty arose with regard to old people when they were no longer able to support or to defend themselves. In a nomadic state of life this difficulty is so great that it could not be solved except by killing the old people. For what is to be done when the soil is exhausted and a tribe has to move forward to occupy new pastures? The old people cannot support the fatigue of the march, and to leave them behind would be to expose them to starvation or a violent death. It was considered merciful under those circumstances, nay, it was believed to be a sacred duty of the nearest relations, to kill the aged members of a family. Storks, before they migrate south, are said to kill the old and lame birds who are unable to follow. In the same way, if we may trust Sir John Lubbock, there are even now among certain savage tribes whole villages where no old people can be discovered, for the simple reason that they all have

been put to death. Mr. Hunt, as quoted by Sir John Lubbock, tells us that one day a young man in whom he took much interest came to him and invited him to attend his mother's funeral. Mr. Hunt accepted the invitation, but as he walked along in the procession he was surprised to see no corpse. When he asked the young man where his mother was, he pointed to a woman who was walking along just in front, to use Mr. Hunt's words, "as gay and lively as any of those present." When they arrived at the grave, she took an affectionate farewell of her children and friends, and then submitted to be strangled.

It is not innate cruelty that can account for this barbarous treatment of the aged: it was a *dura necessitas*. Among our own ancestors, the ancient Germans, Grimm tells us that when the master of the house was over sixty years old, if the signs of the weakness of age were of such a character that he no longer had the power to walk or stand or to ride unassisted and unsupported, with collected mind, free will, and good sense, he was obliged to give over his authority to his son, and to perform menial services. Those who had grown useless and burdensome were either killed outright or exposed and abandoned to death by starvation.\*

However strange and horrible these various ways of disposing of old people may seem to us, there is, nevertheless, a lesson to be learned from our savage ancestors, viz., that there is a time when old people ought to retire. Our religion, our morality, our very humanity would make us shrink from any violent measures to enforce this lesson; but we must not, for all that, shut our eyes to the fact that some of the most serious evils of our modern society are due to the encroachments of old age on the legitimate functions of youth and manhood. If, in ancient times, the difficulty was what to do with old people, the difficulty in our modern society is what to do with young people. And why? Because every sphere of active life in which young men might, naturally and legitimately, hope to find an opening for making themselves useful to the world, and gaining a livelihood for themselves, is filled with men who, nearly or altogether, belong to the class of the

\* Schömann, *Griechische Alterthümer*, 3rd Ed., I, p. 531; Marquardt, *Privatleben der Römer*, I, p. 3, note 1, p. 81.

† Grimm, *Deutsche Rechtsalterthümer*, p. 455.

‡ *Maitrāyaṇī-samhitā*, IV., 6, 4; *Nirukta*, III., 4.

\* Grimm, *Deutsche Rechtsalterthümer*, p. 487; Weinhold, *Altnordisches Leben*, p. 473.

*Deportanti*. It will be argued, no doubt, that old age possesses more experience and wisdom than youth and early manhood can possibly possess. But surely there is a senile as well as a juvenile folly; and even admitting the superior experience of old people, that experience would become far more useful to the world if they were satisfied in their old age to become counselors, and leave the toil and moil of the daily warfare of life to younger men. Besides, the affairs of life require not only prudence and caution, but likewise decisiveness and courage; and when it is considered that the consequences of good or bad counsels must fall, after all, on the heads of the next generation, it is but fair that the young should have some share in determining what is to be done. Besides, we cannot stultify nature. Youth and manhood are better than old age; and with all the advantages that old age may justly be proud of, there are weaknesses which, like white hairs, steal almost unperceived over old heads. No art is able to disguise, and no effort of will strong enough to resist them. Hygienic science may in our days keep people alive longer than in former centuries, and a proper discipline of body and mind may in some cases preserve a *mens sana in corpore sano* beyond the usual limits. But, as a rule, man is meant to learn in his youth, to act in his manhood, to counsel in his advancing years, and to meditate in his extreme old age. It is the disregard of this clear and simple lesson, conveyed by the four ages of man, which is responsible for the worst of our social evils. A young man is meant to marry; but how, in the present state of society, is it possible for a young man and a young woman to contract matrimony at the proper time, unless their parents have saved enough to enable them to do so? Almost every career is now closed against the young man who thinks that he ought to be able to earn a livelihood by his arms or his brains. And the principal reason is that old men now remain too long in active service and enjoy large incomes for doing work which their juniors could do as well, if not better. We get accustomed to everything which has existed for centuries and has the sanction of custom and of law. We know that a man who has children, grandchildren, and great grandchildren may hold the family estate as his exclusive property,

only making to his descendants such allowance as he thinks proper. What seems quite right and fair to us would seem very wrong and unfair in India, where the law enables the sons, when they have come of age, to insist on a division of the family property, which is considered to be theirs as much as their father's. How many a life in England has become useless by the ancestral property being managed or mismanaged by a man of eighty, while the son of forty, or even sixty, is carefully excluded from all participation in the improvement of his future estate. Young men are often blamed because they imagine they must have as large an income as their parents, before they will condescend to marry. There may be some truth in this, but there is also some truth in the answer of young men that parents, after their children's education is finished, might be satisfied with a quieter and less expensive style of life, and not grudge their children those enjoyments which nature has clearly intended for youth and manhood.

In most professions a man who has worked for twenty or twenty-five years ought to be enabled to retire on a pension; that is, be satisfied with a smaller income. Whatever exceptions may be cited to the contrary, our schools and universities, for instance, are clearly sufferers, because professors and tutors are not enabled, or forced, to retire at the approach of old age. Dr. Arnold expressed a very strong opinion as to the maximum of years that a master or headmaster of a public school should be allowed to carry on his work. Other voices have been raised against the Universities allowing heads of houses, professors, and tutors to retain their offices to the very last day of their life. We know, of course, of exceptions, of men lecturing, and lecturing successfully, for thirty and forty years. But, as a rule, a professor as he grows old, however excellent work he may still do by himself, finds it impossible to maintain that warm sympathy with the rising generation which is essential to make his lectures really efficient. His own studies are apt to become more and more special and narrow, and he often finds it impossible to keep pace with the rapid progress of discovery that changes the whole aspect of every science from year to year. By all means let the old professor continue to lecture, if he likes, but let younger men be appointed as his deputies

or associates. It is a real injustice to younger men, whose lives are passing away, that they should have no opportunity of utilizing their knowledge by teaching in our Universities, or that they should succeed to a Chair when they themselves are no longer in the vigor of life. Sometimes the study of a science has been paralyzed for years because—all professorial chairs being occupied by men who would not, because they could not, resign—there was no prospect of employment for younger men, and when at last a vacancy occurred there were hardly any candidates fit to be successors. In Continental universities the system of *Professores extraordinarii* and *Privatdozenten* supplies a certain remedy of the evil complained of, but here, too, the *Professores ordinarii* become sometimes a drag on the advance of science, because there is too little inducement to make them resign.

It would be easy to point out the same mischief in other professions, caused by men remaining in office beyond the limits of time so clearly indicated by nature. Old generals, gouty admirals, deaf judges, and bedridden Bishops are not unknown in this as in other countries. But nowhere does this incubus of old age prove more disastrous than in politics. It has often been said that knowing when to retire is the true test of a great statesman. But if there is any office which it seems almost impossible to surrender it is political office. Nearly all Ministers nowadays are over fifty or sixty, and they often cling to office till they are seventy or eighty. It is in their case, more than in any other, that the necessity of experience and wisdom is pleaded as an excuse for their unnatural pretensions. But experience and wisdom are not the exclusive property of old age, while too much experience may even unfit a man for that quick insight which is constantly required for political action. That old men should be consulted is perfectly natural, but that they should have the decision of the fate of the next generation entirely in their hands admits of no justification. The Germans had an old proverb which went much further, and denied to those who could no longer fight the right of giving advice.

“Die nicht mit thaten,  
Die nicht mit rathen.”

Nor can it be denied that even in coun-

cil the presence of old men is dangerous. The authority claimed by old age, and the respect naturally paid to it by the younger generation, must interfere with the easy and natural transaction of business. If it is difficult for an old man to bear opposition and to brook rebuke from a younger man, it is equally difficult for a young politician to bow to authority or to believe in the infallibility of old age. What is the result? The old statesman gradually finds himself deserted by his honest and independent friends, while opportunists and flatterers surround the old chief and help to extinguish in him the last remnants of humility and of mistrust in his own judgment. Members of the Cabinet, it has often been said, ought to be on terms of perfect equality, and in discussions concerning the welfare of the country argument ought always to be stronger than any amount of authority. Men of about the same age can afford to give and take, but a man of thirty cannot well give to a man of eighty, and a man of eighty cannot well take from a man of thirty. And yet, if we look at the history of the world, political wisdom has certainly not been the exclusive property of old age. A mere stripling, such as Pitt, was a better man at the wheel than even the great Duke of Wellington when, in his old age, he acted as steersman to the vessel of State. In our days it seems difficult to imagine that a man of twenty or thirty could possibly be an Under-Secretary of State, to say nothing of his being Prime Minister. And yet, take it all in all, for practical work, a man of thirty is a better man than a man of eighty, and the sooner men of eighty learn that lesson the better for themselves and for the country they profess to serve. There are exceptions, there are brilliant exceptions, at the present moment, both in England and in Germany. But exceptions in such cases are apt hereafter to become precedents, and to prove extremely dangerous in less exceptional cases. Outside the fight of parties the voice of the old statesman will always be listened to, and carry conviction to many a wavering mind. But if he remains in the turmoil of political warfare he will meet with harsh usage, his best motives will be suspected, and the good fame of his youth and manhood will often be tarnished by the mistakes, however well intentioned, of his old age.

To return once more to India, from whence we started. No doubt the ideal scheme of life, traced out by Manu, is no longer possible, after the contact between the ancient civilization of the East and the modern civilization of the West. But the spirit of the past still exercises its fascination over some superior minds, and the idea that there is a time when the old should make room for the young, and when meditation should take the place of active life, is not yet quite forgotten among the sons of India. A biography has lately been published of the Prime Minister of Kathiawad, Gaorishankar Udayashankar, C.S.I.\* It relates a life full of hard and most important work, a life of struggle, of temptation, and of wonderful success; the life not only of a conscientious administrator, but of a determined diplomatist, holding his own against the best men in the Indian service, and in the end recognized by all, from Mount Stuart Elphinstone to Lord Reay, as an honest and unselfish man, worthy to be named by the side of such native statesmen as Sir Salar Jung, Sir T. Madao Rao, and Sir Dinkar Rao. Only three years ago, in December, 1886, when Lord Reay had paid a visit to the venerable statesman, he said of him: "Certainly, of all the happy moments it has been my good fortune to spend in India, those which I spent in the presence of that remarkable man remain engrafted on my memory. I was struck as much by the clearness of his intellect as by the simplicity and fairness and openness of his mind; and if we admire wise administrators, we also admire straightforward advisers, those who tell their chiefs the real truth about the condition of their country and their subjects. In seeing the man who freed the State from all encumbrances, who restored civil and criminal jurisdiction to the villages, who settled grave disputes with Junaghad, who got rid of refractory Jemadars, I could not help thinking what could be done by singleness of purpose and strength of character." It would be useless to attempt to give even a short outline of the excellent services rendered to his country, and indirectly to England, by Gaorishankar during the fifty-seven years of his active life.

\* Gaorishankar Udayashankar, C.S.I., Ex-Minister of Bhavnagar, now on retirement as a *Sanyâsi*. By Javerilal Umiashankar Yajnik. Bombay, 1889.

The affairs of Serbia, Bulgaria, and Montenegro, the intrigues of King Milan, Queen Natalie, and Prince Karageorgowitch, would seem to be of greater interest to the public at large than the healthy growth and powerful development of the native States of India under English protection. And yet Gaorishankar's life is full of dramatic interest. He had to do battle with many King Milans, with many Queen Natives, even with some rebellious mountain-chiefs, such as Karageorgowitch, and he has come out victorious from all his fights. He not only established the independence of the state of Bhavnagar, but he introduced a reformed system of administration, founded excellent schools, built model prisons, encouraged useful railways, and made Bhavnagar a model among the protected principalities of India. In 1878, when he was seventy-three years of age, and when the idea of retiring from the world had already ripened in his mind, he was once more complimented by Sir J. B. Peile in the following terms:—"Gaorishankar has risen through every stage of a laborious life to this crown and consummation of an honorable public career, a career which he began in a humble position in the old school of custom and ends as a cautious leader in the new school of reform."

This is the man who, on January 13th, 1879, resigned his office as Minister, and, full of years and honors, declared his intention of following the example of the ancient Brahmans, and retiring into the forest. He prepared himself for that step by a deeper study of the *Upanishads* and the Vedânta philosophy than had been possible to him during the years of his busy life. He then retired to a garden-house outside the old town, where he was still accessible to his friends, and where his chief and his former colleagues often came to consult him. He had become a counsellor, but he no longer interfered in public or private affairs. At last, in 1887, his yearning after a purely spiritual life, and his desire to throw off all the fetters and affections that might still bind him to this life, became so strong that he determined to enter on the fourth stage of life and to become a Samnyâsi. The time had come, he declared, that he should prepare himself for holy dying by a complete renunciation of the active concerns of this world and by an exclusive devotion to the

thoughts of a life to come. He wrote letters to all his friends, bidding them farewell for this life. I myself was one of those to whom he said good-by, declaring that he had left the world, that he had changed his name, and that all correspondence between him and the outer world must henceforth cease. These were the last lines of a letter which he addressed to me in July, 1886 :—

" My health is failing and I have made up my mind to enter into the fourth order or *Asrama*. Thereby I shall attain that stage in life when I shall be free from all the cares and anxieties of this world and shall have nothing to do with my present circumstances.

" After leading a public life for more than sixty years, I think there is nothing left for me to desire, except this life, which will enable my *Atma* [self] to be one with *Paramâtma* [Supreme Self], as shown by the enlightened sages of old. When this is accomplished a man is free from birth and re-births, and what can I wish more than what will free me from them, and give me means to attain *Moksha* [spiritual freedom] ?

" My learned Friend, I shall be a *Samnyâsi* in a few days, and thus there will be a total change of life. I shall no more be able to address you, and I send you this letter to convey my last best wishes for your success in life, and my regards which you so well deserve."

Every effort was made by his native friends and by the highest officials of the English Government to dissuade him from his purpose. Every argument that could appeal to his common-sense, his sense of duty, aye, even his vanity, was used, but used in vain. He was not so silly as to attempt to copy slavishly the example of the ancient *Samnyâsis*, and to court death in the wilderness. He remained in his retirement, only he adopted a much stricter discipline, and a more rigorous seclusion from the outer world. He was not so childish, or rather so senile, as to imagine that any one in this life was really indispensable. He knew that younger men would do his work as well, if not better than himself. And he felt that, having done his duty to the world, he might be free during the few remaining years to do his duty to himself. I believe the old man is still alive, now in his eighty-fourth year. When I last heard of him, through his son, he was in full possession of his intellectual powers, with a memory unim-

paired. He has become, in his old age, a zealous student of Sanskrit, and, to judge from what he has published, his knowledge of the Vedânta philosophy is profound. He is now simply waiting for death, and fitting himself to die, following the words of Manu (vi., 43) :—

" Let not the hermit long for death,  
Nor cling to this terrestrial state ;  
Their Lord's behests as servants wait,  
So let him, called, resign his breath."

It may be said that the Minister of Bhavnagar remained in office long beyond the time when he had a perfect right to retire. He was seventy-four when he surrendered the Ministry. Still, he is one of very few statesmen who, even at that time, would have thought it necessary to make room for others, and to reserve a span of life for themselves, as a preparation for a better life. His intellect was unimpaired, his body vigorous, and his friends were clamorous for him to remain in power. But he did not allow himself to be persuaded. He was influenced, no doubt, in his choice, by the teaching of the old sages of India, but his own judgment also must have helped him to obey the voice of nature. To all who have ears to hear, that voice declares in unmistakable tones that there is a time for everything. There is a time to be young and there is a time to be old. Our modern society is out of gear because that lesson of nature is not obeyed. To die in harness has become the ideal of almost every old man. But what might be the right ideal for a cab-horse is not necessarily the right ideal for a human being. In several branches of the public service a remedy has been applied—not the drastic remedy of the Bactrians and Caspians, but the more gentle pressure of the Indian law-givers. Men are made to withdraw into the forest on a retiring pension, and it has not been found that the army and navy have suffered under young generals and vigorous admirals. The same system ought to be applied to all other professions, more particularly to our schools and universities. After twenty-five years of hard work a man ought to be enabled to rest from his labors, if he likes, and the young should be allowed to have their day.—*New Review*.

## A PAGE OF MY LIFE.

BY JOHN ADDINGTON SYMONDS.

How am I to fulfil the promise I have made of writing "A Page of my Life"? My life is so monotonous among these mountains of Graubünden—the snow-landscape around me spreads so uniform beneath the burning sun or roof of frozen cloud, that a month, a week, a day, detached from this calm background, can have but little interest for actors on the wide stage of the world.

Twelve years ago I came to Davos, broken down in health, and with a poor prospect of being able to prolong my days upon this earth. I did not mean to abide here; but having regained a little strength I hoped to pass the winter in a Nile-boat. The cure of lung disease by Alpine air and sun and cold was hardly known in England at that time. When I found my health improve beyond all expectation, the desire to remain where I was, to let well alone, and to avoid that fatiguing journey to Cairo, came over me. Slung in my hammock among the fir trees of the forest, watching the August sunlight slant athwart their branches, the squirrels leap from bough to bough above my head, it seemed to me that life itself would not be worth living at the price of perpetual travelling in search of health. I was thirty-six years of age; and, reviewing the twenty-three years which had elapsed since I went to Hanover as a boy of thirteen, I found that I had never spent more than three months in one place. At all hazards I resolved to put an end to these peregrinations, looked the future calmly in the face, and wrote twenty-two sonnets on "The Thought of Death." Then I informed my good and famous physician in London that I meant to disobey his orders and to shut myself up for the next seven months in this snow-bound valley. He replied that "if I liked to leave my vile body to the Davos doctors that was my affair; he had warned me." In the following spring I wrote an article on my experience, which was printed in a number of the *Fortnightly Review*, and which contributed something perhaps to the foundation of the English Colony at Davos Platz.

Since then, Davos has been my principal place of residence. I have worked incessantly at literature—publishing twenty

volumes, besides writing a large amount of miscellaneous matter, and three volumes which still remain inedited. The conditions under which these tasks have been performed were not altogether favorable. Every book I needed for study and reference had to be dragged to the height of 5,200 feet above the sea. A renowned Oxford scholar was paying me a visit once, when, looking round my modest shelves, he exclaimed, with the sardonic grin peculiar to him: "Nobody can write a book here!" I knew that it was very difficult to write a good book in Davos; that I could not hope to attain perfection or fullness of erudition in the absence from great libraries, in the deprivation of that intellectual stimulus which comes from the clash of mind with mind. But my desire has always been to make the best of a bad business, and to turn drawbacks, so far as in me lay, into advantages. Therefore I would not allow myself to be discouraged at the outset. I reflected that the long leisure afforded by Davos, my seclusion from the petty affairs of society and business, and the marvellous brain tonic of the mountain air would be in themselves some compensation for the privileges enjoyed by more fortunately situated students. Moreover, I have never been able to take literature very seriously. Life seems so much graver, more important, more permanently interesting than books. Literature is what Aristotle called *διαγωγή*—an honest, healthful, harmless pastime. Then, too, as Sir Thomas Browne remarked, "it is too late to be ambitious." Occupation, that indispensable condition of mental and physical health, was ready to my hand in literary works; and I determined to write for my own satisfaction without scrupulous anxiety regarding the result.

The inhabitants of the valley soon attracted my attention. I resolved to throw myself as far as possible into their friendship and their life. These people of Graubünden are in many ways remarkable and different from the other Swiss. It is not generally known that they first joined the Confederation in the year 1803, having previously, for nearly four centuries, constituted a separate and independent state—highly democratic in the forms of gov-

ernment, but aristocratic in feeling and social customs, proud of their ancient nobility, accustomed to rule subject Italian territories and to deal with sovereigns as ambassadors or generals. These peculiarities in the past history of the Canton have left their traces on the present generation. Good breeding, a high average of intelligence, active political instincts, manliness and sense of personal freedom are conspicuous even among the poorest peasants. Nowhere, I take it, upon the face of the earth, have republican institutions and republican virtues developed more favorably. Nowhere is the social atmosphere of a democracy more agreeable at the present moment. What I have learned from my Graubünden comrades, and what I owe to them, cannot be here described in full. But their companionship has become an essential ingredient in my life—a healthy and refreshing relief from solitary studies and incessant quill-driving.

So much about my existence as a man of letters at Davos had to be premised in order that the "Page of My Life" which I have promised, should be made intelligible. And now I really do not know what page to tear out and present here. Chance must decide. My desk-diary for this year (1889) happens to lie open at the date, February 28. That page will do as well as any other.

Friends are kind enough to come and stay with us sometimes, even in the winter. We had been enjoying visits from one of the British Museum librarians, from an eminent English man of letters and his more than beautiful wife, and also from a Secretary of Legation to one of the German Courts. During the first two months of the year sleighing-parties, toboggan-races, and the other amusements of the season had been going forward. I was further occupied with founding a gymnasium for the young men of Davos, which occasioned endless colloquies at night in the dusky rooms of the old Rathaus, followed by homeward walks across the noiseless snow, beneath the sharp and scintillating stars. All this while I had been correcting the proofs of my book on *Carlo Gozzi*, and composing four laborious essays on that puzzling phenomenon which we call "Style." I was fairly tired and wanted a change of scene. So I proposed to one of my daughters that we should pay a long-contemplated visit to some Swiss

friends living at Ilanz in the Vorder Rheinthal, or, as it is also called, Bündner Oberland.

Behold us starting then for our thirteen hours' sleighing journey, wrapped from head to foot in furs! It is about half-past six on a cold gray morning, the thermometer standing at 3° F., a sombre canopy of mist threatening snow, and the blue-nosed servants of the watering-place torpidly shivering back to their daily labors like congealed snakes. Davos Platz does not look attractive at this hour of a winter morning, when the chimneys of the big hotels and bake-houses are pouring forth spirals of tawny smoke, which the frozen air repels and forces back to blend with vapors lying low along the stream. Tearing through the main street on such occasions, I always wonder how long what boasts to be a "Luft-kur-ort," or health-resort, depending on the purity of air for its existence, will bear the strain of popularity and rapid increase.

As we break away into the open country these gloomy thoughts are dispelled. For now the sun, rising behind the mountains of Sestig in gold and crimson, scatters the mist and gives the promise of a glorious day. Spires and pinnacles of burnished silver smite the flawless blue of heaven. The vapor round their flanks and forests melts imperceptibly into amber haze; and here and there broad stripes of dazzling sunlight turn the undulating snow-fields round our path to sheets of argent mail thickly studded with diamonds—crystals of the night. Every leafless larch or alder by the stream-bed is encrusted with sparkling frost-jewels, and the torrents, hurrying to the Rhine, chafe and foam against gigantic masses of gray-green ice, lipped with fantastically curving snow-wreaths. We are launched on the intoxication of a day-long sleigh-drive. Hour after hour passes with no change but the change of postilions and horses, occasional halts at wayside inns, and the ever-varying pageant of the frozen landscape unrolled around us. Ravines and gorges, to which the sunlight never pierces, but walks with feet of fire along the cliffs above, turning those bristling pines against the sky-line into burning bushes, and sleeping for miles upon white ridges whence the avalanche descends. Slow climbings up warm slopes between the red trunks of larches, where squirrels flirt upon the russet needles shed through

unstirred air. Break-neck gallopings down steep snow-covered hills, through sleepy villages, past wagons laden with enormous tree-stems, under the awful icicles suspended like shining swords of Damocles from cliffs a hundred feet above our heads. How so many tons of ice, apparently defying the law of gravitation, keep their place upon those precipices through a winter, increasing imperceptibly in volume, yet never altering their shape, nor showing the least sign of moisture at their extremities, has always been a mystery to me. The phenomenon of the growth of ice cataraacts from little springs hidden in the crannies of black drizzling rocks ought to be investigated by a competent scientific authority. It is a standing wonder to the layman.

I have said that there is a kind of intoxication in such a journey. But a better word for the effect would perhaps be hypnotism. You resent any disturbance or alteration of the main conditions, except to eat or drink at intervals, you do not want to stop. You are annoyed to think that it will ever end. And all the while you go on dreaming, meditating inconsecutively, smoking, exchanging somnolent remarks with your companion or your driver, turning over in your mind the work which you have quitted or the work you have begun. This day my thoughts were occupied with the national hero of Graubünden, Georg Jenatsch—a personage like some one in the Book of Judges—the Samson who delivered his oppressed tribesmen from the hands of their Amalekites, Moabites, and Philistines (French and Spanish and Austrian armies), during the Thirty Years' War. Georg Jenatsch accompanied me through the hypnotism of that drive. We passed some of the scenes of his great exploits—the frightful cliffs of the Schyn-pass, over which he brought his Engadine troops one winter night by a forced march, losing several heavy-armed men among their murderous ravines—the meadows of Valendàs, where he defeated the population of the Oberland in a pitched battle at night, fighting up to the waist in snow and staining it with blood—the castle of Ortenstein, where he murdered Pompey Planta with his own hands among the tyrant's armed allies one Sunday morning—the church of Scharàns, where, to use his own words, he “lied so much,” before he exchanged the pastor's gown and ruff for casque of steel and harquebuss

—the village of Rusia, in which he held his Reign of Terror, torturing and beheading the partisans of the Spanish Crown.\*

It would be tedious to relate all the details of this journey. Following the Landwasser and the Albula, we reached the Rhine at Thusis, and drove along its banks to the point where the solitary Castle of Rhäzüns frowns above melancholy precipices, crested with enormous Scotch firs, surveying the gloomy eddies of the river. Then we turned suddenly aside, and began to ascend the valley of the Vorder-Rhein, among the weird earth-chasms of Versämen. That is a really hideous place, unlike anything but the sinister Balze, which break away below Voltessa. But here, six hundred feet beneath the road, the inaccessible Rhine chafes, throttled in its stony gorge, and the earth-slopes above, forever crumbling away and shooting stones down on the traveller, rise to an equal height, dismal, forlorn, abandoned by the beautifying veil of snow, which slides away from them in avalanches, rent and ploughed into ravines as by the malice of some evil spirit. Day was well-nigh spent when we emerged from these dangerous chasms into the woods which close the entrance to the Safien-thal. The unearthly ethereal lucidity which winter skies assume at sunset in our mountains sheds soft lights of amber and of rose upon the distant range of Tödi, and bathed the ridges of Calanda and the Alps of Steins in violet glory. Our horses toiled slowly upward through the forest, whose sombre trunks and sable plumage made the distant glow more luminous—crunching with their hoofs a snow-path hard as Carrara marble, and grinding the runners of the sleigh into the track, which shrieked at every turning. That is the only noise—this short, sharp shriek of the frozen snow, that, and the driver's whip, and the jingling bells upon the harness—you hear upon a sleigh-drive. And these noises have much to do with its hypnotism.

It was nearly dark when we left the wood, and broke away again at a full gallop for Ilanz. In a broad, golden space of sky hung the young moon and the planet Venus, lustrous as pearl illuminated by some inner fire, and the whole open

\* I hope to write a book on Georg Jenatsch and his part in the Thirty Years' War this winter.

valley lay still and white beneath the heavens.

Ilanz is a little walled town—proud of its right to be called *Stadt* and not *Dorf*, in spite of the paucity of its inhabitants. It is almost wholly composed of large houses, built in the seventeenth century by noble families with wealth acquired in foreign service. Their steep gabled roofs, towers, and portals, charged with heraldic emblazonry, cluster together in a labyrinth of alleys. Orchards stretch on every side around the town-walls, which are pierced with old gateways, where the arms of Schmid von Grüneck, Salis, Planta, and Capoul shine out in ancient carvings, richly-gilt and highly-colored. The sleepy little town is picturesque in every detail, and rapidly falling into decay. From being a nest of swashbucklers and captains of adventure, it has become the centre of an agricultural district, where Swiss provincial history is languidly carried on by the descendants of the aristocratic folk who built the brave old mansions. One narrow and tortuous street runs through the town from main gate to gate. On the further side, among the orchards, stands the house of our Swiss friends, under whose hospitable roof I left my daughter. At the other side is the principal inn, close to the covered wooden bridge across the Rhine; and here I took up my own quarters. The street between offered a variety of dangers during the night-hours. It was innocent of lamps, and traffic had turned it into a glassy sheet of treacherous, discolored ice.

There was a concert and a ball in the hotel that evening. A singing-club for male voices, renowned throughout the Canton under its name of "*Ligia Grischa*," assembles once a year at Ilanz, gives a musical entertainment, sups in state, dances till dawn, and disperses in the morning to homes among the hills. I always wished to be present at one of this club's meetings, and had timed my visit to Ilanz accordingly. I ought to say that the old State of Graubünden was composed of three Leagues, the eldest of which was called, *par excellence*, the Grey League; and the folk who formed it for their freedom in the first years of the fifteenth century had their hold in Ilanz and the neighborhood. They spoke then, and the people still speak, a dialect of rustic Latin, which we call Romansch. In this dialect the Grey

League is *Ligia Grischa*. Hence the designation of the singing-club.

It was a splendid opportunity for seeing the natives of the Bündner Oberland. Not only were the rank and fashion of Ilanz present in full force, but men and women from remote valleys hidden in the folds of the surrounding hills—the hills whose glories roll down the fountains of the Rhine—had trooped into the town. The concert-room was crammed to overflowing. Its low roof did but little justice to those masculine and ringing voices, which throbbed and vibrated and beat against the walls above the densely packed heads of the audience. What a striking sea of faces and of forms! I wished that my good friend, Dr. John Beddoe, the illustrious ethnologist, had been there to note them; for the people reckon, I believe, among the purest aboriginals of Central Europe. They are for the most part dark-complexioned, with very black hair and eyebrows; a low, narrow, rounded forehead, curving upward to a small oval skull; deep-set brilliant eyes, placed close together, blazing sometimes like coals. The face is narrow, like the forehead, with a great length of nose and firmly-formed prominent jaws. Set upon shoulders of athletic breadth and a sinewy throat, this small head, with its packed and prominent features, gives the impression of colossal and plastic strength. In old men and women the type is wonderfully picturesque, when the wrinkles and experience of a lifetime have ploughed their record deep. But, as is usual with Swiss mountaineers, the young women are deficient in comeliness, not to say in grace and beauty; and the young men, though more attractive, from their limber muscularity and free, disdainful carriage, do themselves no credit by their dress. They wear the coarsest, ill-made home-spun. It is only when their superb forms are stripped for athletic exercise that you discern in them models fit for Donatello and Michel Angelo—those lovers of long-limbed, ponderous-shouldered, firmly-articulated, large-handed specimens of humanity, with powerful necks and small heads.

The faces of these young men make me pause and wonder. They are less like human faces than masks. Sometimes boldly carved, with ardent eyes, lips red as blood, and a transparent olive skin, these faces yield no index to the character within by any changes of expression. The speech

that comes from them is simple, well-bred, unimaginative, destitute of ideas and emotions. And yet I know that these same men are capable of the most tenacious passions, the suddenest self-abandonment to overmastering impulse. It seems as though their concentrated life in village homes had made them all of one piece, which, when it breaks or yields, splits irretrievably to fragments.

I will tell some stories which prove that the Swiss peasants, though they look so stolid, have in them the stuff of tragedy. There was a lad in a valley called Schaufegg, not long ago, who loved and was betrothed to a girl in the Hinter Rheinthal below Splügen. She jilted him, having transferred her affections to another; and he went to take a formal farewell of his sweetheart in her home. Everything passed decorously: so much so the girl's brother put his horse into the cart and drove the rejected lover with his own sister down to Thusis. The three had reached that passage of the Via Mala where the Rhine loses itself in a very deep, narrow gorge. It is called the "Verlosene Loch," and is spanned by a slender bridge thrown at right angles over the river. Here, as they were spinning merrily down-hill, the lad stood up in the cart, sprang to the parapet of the bridge, and dashed himself at one bound into the grim death of jagged rocks and churning waves below them. It was a stroke of imaginative fancy to commit suicide for love just at this spot. And now a second tale of desperate passion. A rich man in the Prättigau had two children, a daughter and a son. The daughter wheedled him into allowing her to marry some peasant, who was poor and an unequal match in social station. Then his son set his affections upon a girl equally ineligible. The father stormed; but the youth was true to his plighted troth. During a temporary absence of the son, his father contrived to send the girl off to America with a round sum of money. On his return, after hearing what had happened, the lad said nothing, but went down to the Landquart water in the evening and drowned himself there. And now a third tale. Last spring, in a village not three hours distant from Davos, lived a young man who was an orphan. He had inherited a considerable estate, and expected more from two uncles. Life, could he have managed it prudently, would prob-

ably have made him the wealthiest farmer in the neighborhood; and he was, to boot, a stalwart fellow on whom nature had lavished all her gifts of health and comeliness. Unluckily, he loved a girl of whom his uncles disapproved as a match for such a youth of consequence. One Saturday evening, as the custom is here, he went to pay his addresses by stealth to this maiden of his choice, and returning early next morning, he was upbraided by his interfering uncles. I do not know what he replied; but certainly he made no scene to speak of. When the uncles left him, he unhooked his gun from the wooden panelling of the house-room, went out alone into the copse hard by, and put a bullet through his brain.

That is the sort of things of which these youngsters, with their heavy gait and scornful carriage, are capable of doing. The masks they wear for their faces are no index to the life that throbs within.

Well, I am digressing from Ilanz and the Ligia Grischia. After the concert there came the banquet, and after the banquet came the ball. About three in the morning, having smoked many pipes with friends in homespun, I retired to my well-earned rest and slept soundly, although the whole inn was resonant with fifes and violins, and stamping, shouting burschen. You should have seen the last dregs of the orgy, the *petits crevés* of Ilanz, when I came down to breakfast at eight. Some of them were still dancing.

Next day we took a sleigh and drove up the valley of Lungnez. Such a silent snow scene under the steady flooding sunshine! The track between wood and precipice was just broad enough for our runners till we came close to Villa. There the valley expands, yielding a vast prospect over the mountains-passes which lead to Splügen and to Olivone—a wilderness of craggy peaks and billowy snow-fields, all smoothed and softened with clear sunshine and blue shadows. No one can paint, no words can describe, that landscape. It must be seen and then it will never be forgotten. A baronial family, De Mont, were lords of Villa in old days, and now they keep an inn there in one of their ancestral houses. Portraits of generals and ladies look down upon the casual guest, among emblazoned scutcheons with famous quarterings — Scharenstein, Castelberg, Toggenburg — discernible by specialists

who (like myself) love to trace a nation's history in its heraldries. Photographs of more recent De Monts, abroad in the world, have a modest place beneath these canvases upon the planks of Cembra-pine which form the panelling. It is by no means uncommon in this country to find the homes of people whose ancestors were counts or barons of the Empire, nobles of Spain and France, and whose descendants could bear such titles if they chose, turned into hostels. I sometimes wonder what they think of American and English tourists. When I make inquiries about their former state, and show some knowledge of their family, it is always appreciated in the grave, dignified way these people of Graubünden have with them.

The chief attraction of Villa—letting alone the annals of Lungnez, of which I have not here the time to speak—is an old church, at Pleif, built on a battress of the hills far up above the torrent. It occupies a station which would be singular in any land; and it commands a view of peaks, passes, glaciers, and precipices which even in Switzerland is rare. Once it was the only church in the vast upland region it surveys. The tolling of its bell brought stalwart Catholics from far and near, trooping under arms to join their forces with the men of Ilanz, Trons, and Dissentis, and then to march with flying flags on Chur. That was in the times when Graubünden struggled in religious strife between Catholics and Protestants, partisans of the French and Spanish sides. The building is large and of venerable antiquity. On its walls hangs a huge oil-painting—surprising to find in such a place—a picture, clearly by some Venetian artist, of the battle at Lepanto, just such a canvas as one sees in the Ducal Palace on the Lagoons. The history of this picture, and why it came to Pleif, seems to be forgotten; but we know that the Grisons in the sixteenth century were stout allies and servants of St. Mark's.

It was not the inside of the church at Pleif which attracted my notice, but the graveyard round it, irregularly shaped to suit the rocky station, girt with fern-plumed walls, within which were planted ancient ash-trees. A circuit of gnarled, bent, twisted, broken ash-trees. In Westmoreland or Yorkshire they would not have had the same significance; but here, where all deciduous trees are scarce, where the

very pine-woods have been swept away by avalanches and the violence of armies, each massive bole told a peculiar story. I thought of the young men, whose athletic forms and faces like masks impressed my fancy, and something breathing from the leafless ashes spoke to me about them. Here was the source of their life's poetry; a poetry collected from deep daily communings with Nature in her shyest, most impressive moods; a poetry infused into their sense unconsciously; brought to a point and gathered into some supreme emotion by meetings with a girl in such a place as this—the hours of summer twilight, when the ash-trees are laden with leaves, and the mountains shrink away before the rising moon, and the torrent clamors in the gorge below, and the vast divine world expresses its meaning in one simple ineffaceable word of love. I seemed, as I sat upon the wall there in the snowy, sunny silence, to understand a little more about the force of passion and the external impassiveness of this folk, whom I dearly love. I felt why those three lads of whom I spoke had thrown their lives away for an emotion, breaking to pieces because the mainspring of their life was broken—that which moved them, for which they had grown up to manhood, through which the dominant influences of nature on their sensitive humanity had become manifest in an outburst of irreversible passion. Then I remembered how a friend of mine from Triun talked to me once about the first thoughts of love evoked in him, just in a place like this. It was on the top of a hill called Canaschâl, where there is a ruined castle and a prospect over both the valleys of the Rhine, and the blending of that mighty river's fountains as it flows toward Chur. He was a boy of fifteen, my friend, when he saw the simple thing of which he told me at the age of twenty-three. A pair of lovers were seated on the cliffs of Canaschâl—the lad and the girl both known to him—and he was lying in the bushes. It was the sight of their kisses which informed him what love was; and the way in which my carpenter-friend spoke of the experience seven years afterward made me conceive how the sublime scenery and solitudes of these mountains may enter into the soul of lads who have nothing to show the world but masks for faces.

I give this here for what it is worth.

We have heard much of the Swiss in foreign service dying of home-sickness at the sound of the "Ranz des Vaches." We have also learned the proverb, "Pas d'argent, pas de Suisse." I think that the education of young men in these Siren mountains—far more Siren than the mermaids of Sorrento or Baiæ, to any one who once has felt the spirit of the Alps—combined with their poverty, their need of making money to set up house with, accounts for the peculiar impression which they make on town-bred foreigners, and for their otherwise inexplicable habit of wedding the uncomely daughters of the land.

I will not linger over our drive back from Ilanz. One sleigh-journey is like another, except for the places one stops at, the postilions one talks to, the old wooden rooms one drinks in, the friends one visits on the way, and the varieties of the grand scenery one sweeps through.

It has been my constant habit for many years to do a considerable amount of hard study while travelling. It would be difficult to say how many heavy German and Italian books on history, biography, and criticism, how many volumes of Greek poets, and what a library of French and English authors, have been slowly perused by me in railway stations, trains, steamers, wayside inns, and Alpine chalets. I enjoy nothing more than to sit in a bar-room among peasants, carters, and postilions, smoking, with a glass of wine beside me, and a stiff work on one of the subjects I am bound to get up. The contrast between the surroundings and the study adds zest to the latter, and when I am tired of reading I can lay my book down and chat with folk whom I have been half-consciously observing.

On this short trip I had taken a remarkable essay, entitled *La Critique scientifique*, by a young and promising French author—now, alas! no more—M. Emile Hennequin. The writer tries to establish a new method of criticism upon a scientific basis, distinguished from the æsthetical and literary methods. He does not aim at appreciating the merit of works of art, or of the means employed in their production, or of the work itself in its essence, but always in its relations. He regards art as the index to the psychological characteristics of those who produce it, and of those whom it interests and attracts. His method of

criticism may be defined as the science of the work of art regarded as a sign. The development of these ideas in a lengthy and patient analytical investigation taxes the reader's attention pretty severely, for some of Hennequin's views are decidedly audacious, and require to be examined with caution. Well, I had reached Chur on my homeward route, and was spending the evening in the little hotel I frequent there. It has a long, low, narrow room with five latticed windows, and an old stove of green tiles, for its *stube*, or place of public resort. Here I went to smoke and read M. Hennequin's book on criticism. Three diligence conductors and a postilion, excellent people and my very good friends, were in a corner by the stove, playing a game of *yass*; and after exchanging the usual questions with these acquaintances, I took my seat near them and began to study. About ten o'clock they left, and I was alone. I had reached the point in Hennequin's exposition of what he somewhat awkwardly termed *esthopsychologie*, which is concerned with the theory of national literature taken as a sign of national character. This absorbed my attention, and nearly an hour must have passed when I was suddenly disturbed by the noisy entrance of seven hulking fellows in heavy great-coats, with, strange to say, eight bright green crowns upon their heads instead of hats. I write eight advisedly, for one of them wore two wreaths, of oak and bay respectively.

In a moment I perceived that a gymnastic performance, or *Turnfest*, must have taken place; for I recognized two of the men whom I knew to be famous athletes. They came up, shook hands, introduced to me their comrades, and invited me to drink a double-litre of Valtelline wine. I accepted with alacrity, shut up my treatise upon criticism, and sat down to the long central table. Meanwhile, the gymnasts had thrown off their great-coats, and stood displayed in a costume not very far removed from nudity. They had gained their crowns, they told me, that evening at an extraordinary meeting of the associated *Turnvereins*, or gymnastic clubs of the canton. It was the oddest thing in the world to sit smoking in a dimly-lighted, panelled tap-room with seven such companions. They were all of them strapping bachelors between twenty and twenty-five years of age; colossally broad in the chest

and shoulders, tight in the reins, set massively upon huge thighs and swelling calves; wrestlers, boxers, stone-lifters and quoit-throwers. Their short, bull-throats supported small heads, closely clipped, with bruised ears and great big-featured faces, over which the wreaths of bright, green, artificial foliage bristled. I have said that the most striking thing, to my mind, about the majority of young faces in Graubünden is that they resemble masks, upon which character and experience have delved no lines, and which stare out in stolid inscrutability. These men illustrated the observation. Two of them had masks of wax, smooth, freshly-colored, joining on to dark, cropped hair. The masks of three seemed to be moulded out of gray putty, which had hardened without cracking. The sixth mask was of sculptured sandstone, and the seventh of exquisitely chiselled alabaster. I seemed to be sitting in a dream among vitalized statues of the later emperors, executed in the decadence of art, with no grasp on individual character, but with a certain reminiscence of the grand style of portraiture. Commodus, Caracalla, Alexander Severus, the three Gordians, and Pertinax might have been drinking there beside me in the pothouse. The attitudes assumed by these

big fellows, stripped to their sleeveless jerseys and tight-fitting flannel breeches, strengthened the illusion. I felt as though we were waiting there for slaves, who should anoint their hair with unguents, gild their wreaths, enwrap them in the paludament, and attend them to receive the shouts of "Ave Imperator" from a band of gladiators or the legionaries of the Gallic army. When they rose to seek another tavern, I turned, half-asleep, into my bed. There the anarchy of dreams continued that impression of resuscitated statues—vivified effigies of emperors, who long ago perished by the dagger or in battle, and whose lineaments the craft of a declining civilization has preserved for us in forms which caricature the grace and strength of classic sculpture.

Next day I found myself at Davos Platz, beginning my work again upon accumulated proofs of Gozzi and the impossible problem of style.

This is literally a page of my life, a page extracted and expanded from my desk-diary. I have done what I promised the Editor of the *Fortnightly Review*. In conclusion, however, I must remark that I do not altogether like this novel idea of making a man interview himself.—*Fortnightly Review*.

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"PROVERBIAL PHILOSOPHY."

THE secret of Mr. Tupper's success in selling his only very successful work was, we believe, only this,—that the less educated middle class is far less thoughtful than it appears to be. A contributor, whom we know to have an unusually extensive and practical experience of the subject, recently explained in our columns one of the literary needs of shop-girls, factory-girls, and other young women in their mental condition. A book to attract them must be what critics would call a poor book,—that is, a book full of well-worn thoughts, strung together in the most ordinary manner, with commonplace incidents, and reflections of the regular copy-book kind. Anything which is not simple puzzles and slightly worries them; anything allusive is unintelligible to them; while anything original creates in them the faint irritation with which a certain class of mind receives a joke, and especially a

joke implying something of a jeer. They resent surprise as we should resent a new taste in the loaf. Fifty years ago, minds in the condition of these shop-girls were in the majority among the middle class, and even now they are more numerous than is suspected, no modern art having been so successfully and generally acquired as that of concealing your mental backwardness; and it was their possessors who bought, and who, when they happen not to be aware that their betters ridicule the book, still buy "Proverbial Philosophy." Scores of thousands, for example, of American farmers' wives bought it, and so did the uncultivated but fairly prosperous wives of the well-to-do tradesmen in English country towns, people with many duties, usually strictly performed, much observation of a kind upon the facts of life, but no power of independent thinking or desire for it. One of the most suc-

cessful business men we have known kept the book in his desk, and whenever work was slack read it, as he said, to recover his mind. Such people genuinely admire the book, and until the storm of contemptuous criticism grew as unbearable as the ridicule of the clergyman is to superstitious country-folk, they expressed their admiration aloud. There is a theory now prevalent that this admiration was never genuine, that the book was, by pure accident, accepted as a proper and harmless book, and that it was only purchased to be given away to growing girls; but we cannot accept that theory. The present writer saw it forty years ago on too many tables, and heard too many angry declarations that it was an admirable book, to believe that explanation, even if it were not contradicted by two admitted facts. The American farmers, who give nothing away, were its largest purchasers, and its reception modified, though perhaps only in the sense of exaggeration, the whole character of its author. He was probably by nature a vain man, or rather, one full of the simple confidence in himself which the book itself reveals; but from the date of its success, he became immovably convinced that he was a great author. He was by no means a fool, and he did not deduce this judgment from its sale merely—as a still more illustrious and successful author is said to do—but from the reams of letters, all laudatory and some worshipping, which reached him from all parts of the English-speaking world, and from men as well as women. His correspondents were neither joking nor seeking to curry favor; they genuinely and heartily enjoyed his work, and it is not difficult to perceive why they did so. The book is, if viewed through a proper medium, a great deal better than critics who hunt in books for force or originality, or instruction of some sort, can bring themselves to allow. There is no poetry in it, or depth, or height, or strength of any kind. But then, there are plenty of ordinary thoughts, usually true thoughts, platitudes in fact, expressed in the most intelligible English, with words so arranged that if you adopt the sing-song in which the half-educated usually read aloud, the sentences acquire a certain slow and monotonous cadence, which must be pleasant to many ears, or all parish clerks of the elder kind—passed now, Heaven be thanked! into the *Ewigkeit*—and many

country clergymen would not have read the Psalms as they used to do. We take this half-page, for example, absolutely at random, as the one at which a new copy opened:—

"For all things leave their track in the mind;  
and the glass of the mind is faithful.  
Seest thou much mirth upon the cheek?  
there is then little exercise of virtue:  
For he that looketh on the world, cannot be  
glad and good:  
Seest thou much gravity in the eye? be not  
assured of finding wisdom;  
For she hath too great praise, not to get  
many mimics.  
There is a grave-faced folly; and verily, a  
laughter-loving wisdom;  
And what, if surface judges account it vain  
frivolity?  
There is indeed an evil in excess, and a field  
may lie fallow too long;  
Yet merriment is often as a froth, that man-  
tleth on the strong mind:  
And note thou this for a verity,—the sub-  
tlest thinker when alone,  
From ease of thoughts unbent, will laugh  
the loudest with his fellows:  
And well is the loveliness of wisdom mir-  
rored in a cheerful countenance,  
Justly the deepest pools are proved by dim-  
pling eddies;  
For that, a true philosophy commandeth an  
innocent life,  
And the unguilty spirit is lighter than a  
linnet's heart:  
Yea, there is no cosmetic like a holy con-  
science;  
The eye is bright with trust, the cheek  
bloomed over with affection,  
The brow unwrinkled by a care, and the lip  
triumphant in its gladness."

That will seem to the educated almost childish, but it is quite intelligible—with a reserve about the false use of the word "cosmetic"—it is perfectly true, and the idea it conveys is one greatly to be commended. These were the very qualities the buyers of "Proverbial Philosophy" wished for, it may be from ignorance and vacancy of mind, as our contributor believes of the shop-girls; or it may be, as we should be inclined to think, from these and from a certain lazy-mindedness such as tempts the educated on a holiday to read over again stories and books of reflection which they know already by heart. The buyers wished for commonplaceness, if only to see that an author, a man who could get his words into print, thought just the same thoughts as they did, and expressed them in just the same didactic, not to say pompous, way. They were quite proud to understand him so well—

and certainly Tupper has the merit of intelligibility—and to agree with him so often; and till they were shamed out of it, they quoted him, as all Asiatics and most English agricultural laborers to this day quote proverbs. We think it is Mr. Hardy who describes the delight with which a rural postman or carrier, or some such person, hears the sentence: "More people know Tom Fool than Tom Fool knows." The postman had never heard it before; it was perfectly intelligible to him; he had thought the same thing often by himself, and he repeated the aphorism all day, and for weeks afterward, with a chuckle of what was genuine literary delight. He felt like a member of a suburban "Parliament" when he finds his last opinion in the *Times*. That was the precise mental position of the devotees of Mr. Tupper, and though their standpoint has since been elevated, that will be their position when the next book arrives which shall "fetch" them, but seem to critics, whose standpoint has also risen, almost too inferior for comment. Fortunately, such books must always be rare, because they require too many combined conditions,—an author who can write such a one in confident simplicity and without writing down to this audience, a publisher who is in the mental position of the ordinary buyer of such a book—now becoming a rarity, except perhaps in the religious-book world, and we feel no certainty even of that—and an accidental failure of all true critics to catch the ear of the critics who are near enough to the multitude to be rapidly effective. The author, we must add, must be as good as well as goody as Mr. Tupper, who never wrote an injurious sentence in his life. He may perhaps be a little more worldly-wise, shrewdness being the quality first developed in cities, where more than half our people now live; but he must not be cynical, must on no account be witty, and must heartily agree with the kind of creed—a compound of genuine Christianity and rampant respectability—which the mass of Englishmen and Americans still in their hearts think the only safe guide for human life. It is an excellent guide in the absence of a better, and it is not unpleasant to think that the author who disregards it, still more the author who derides it, will not have the success of Mr. Tupper in reaching the stratum of society to which alone he—of

course quite involuntarily, for he wanted to enlighten all mankind—succeeded in appealing.

We wonder if there is any book which is to the educated what "Proverbial Philosophy" was to the half-educated of forty years ago. The question, of course, can never be answered, because to be in the position of an admirer of Mr. Tupper, one must be too incapable of criticism to give or even to think of an accurate reply. It requires, too, a little more audacity than the majority of reflective men possess, or, at any rate, will acknowledge. If we had such audacity, we would make clear our dim suspicion that there does exist in the higher regions of thought a philosopher whose position bears a close analogy to that of the deceased maker of aphorisms, who, in fact, instructs the educated as Mr. Tupper instructed the ignorant, and who will share his literary fate; but plainness on such a subject cannot be required of any man. We may, however, as he has joined the majority, be permitted to remark that Emerson in his flatter bits does sometimes suggest Tupper, and that men who now seem to us all very wise, but whom an advancing criticism will reject, must exist, and, indeed, must be common enough. If not, why do so many popular books of wisdom die? If the law of progress extends to the intellect, and "the thoughts of men are widened with the process of the suns," much of the literature we now think great will seem to succeeding generations either inexpressibly commonplace or simply silly. We cannot fully prove that argument from books, because the books rejected retreat into holes and corners, and are gradually forgotten—the only one we can think of as sure to be familiar to our readers is the astonishing collection of pompous rubbish known as "Blair's Sermons"—but just let any critic who doubts our proposition turn to the old files of any newspaper which has stood the storms of two or three generations, and see what he thinks of the wit and wisdom of its early articles. He will often find himself unable even to comprehend the mental position of their writers, and compelled to doubt, in a fashion which is quite unreasonable, whether they ever did attract or guide the men of their generation. They did, nevertheless; it is only the standpoint which has altered; and we may all learn from them a little

humility, and a little tolerance, too, for the people, so curious and unintelligible to us, who honestly believed that Mr. Tupper had quite beaten Solomon, and had added perceptibly to the world's store of wisdom and experience. He had perhaps

added nothing, certainly we can point to no such addition; but he had done it no harm, and that, as the shoals of books increase, will be by and by much to say.—*Spectator.*

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FROM AFRICA.

BY GRANT ALLEN.

THESE fine mornings the Arabs often come up with their packs on their backs, and open a little private shop of their own for our special benefit under the white piazza of this very villa.

I will frankly admit, however, that herein I have followed to the extreme letter the Horatian precept, and dashed at once *in medias res* with what may, perhaps, be considered by formal minds undue precipitancy. Let me hark back once more and start over again from the beginning, by performing the function of the First and Second Gentlemen, who succinctly explain in a short dialogue to the attentive audience the state of affairs at the raising of the curtain.

The villa, then, stands on a bright Algerian hill-side, with a magnificent view across the ravine to the wine-press opposite, and a glimpse down the valley toward the distant peaks of the dim blue Atlas on the eastern horizon. It is white, and Moorish, and deliciously African, and it has horseshoe arches, and tiled façades, and a squat flat roof after a fashion to delight the most enthusiastic orientalist. In place of a porch, there is a covered piazza, open toward the sun; and here, when fitting weather permits such commercial ventures, Ben-Marabet the Arab unrolls his stock of Tlemöen prayer-rugs, or stately Abd-er-Rahman, from the recesses of the Djurjura, sets out his neat and unique collection of red and black hand-made Kabyle pottery. Then all the world of the villa turns out in force to chaffer, cheapen, and buy the curious wares; and, as business here is by no means conducted with punctuality and despatch, on the American pattern, the purchase of a few little tortoiseshell kous-kous spoons, or the acquisition of a pair of inlaid black-and-steel Moorish daggers, suffices to afford us, in the modest language of a London newspaper ad-

vertisement, "a complete morning's entertainment."

The merchants themselves—it would be sheer desecration to call those noble Orientals peddlars—are in their own persons delightful studies of eastern life, costume, and character. There is one fat Moor who often comes, round, sensuous, and chubbily smooth faced; a thrifty, oily, persuasive man, one that sleeps o' nights, and with vast command of shrugs and nods and insinuating glances; he seems to embody and personify in his own frame the ideal Turk, the long product of polygamy and harems, redolent of musk, garlic, and stale Latakia. Damascus embroideries are what he oftenest brings, relieved at times by carpets from Stamboul, and exquisite needlework from the villages of Crete or the Greek islands. He wears baggy white trousers, a green embroidered jacket, an oleaginous smile, and an ample much-wreathed yellow turban. Then there is the philosophic Kabyle, again, from the snow-clad mountains, own brother to Jacques in "As You Like It." He wears nothing in particular that I can remember except a corn-sack or a night-shirt—I am uncertain to which of the two species I ought to refer that one nondescript garment: but his handsome, listless face, his big, dreamy blue eyes, his lithe figure, and his blond hair mark him out at once in dirt and rags as a descendant and representative of the old aboriginal Berber race, the primitive "white men" of antique North Africa. Jewelry and metal-work form his stock-in-trade. A melancholy smile is his best advertisement. And there are the Arabs, once more, the real, unadulterated Semitic sons of the desert, magnificent fellows, with grand, stately forms and keen black eyes, true princes by birth, in long bernouses, but, unhappily, reduced by the pressure of adverse

circumstances under infidel rule to gain an honest livelihood in the itinerant rug trade. I've no doubt they would greatly prefer robbery with violence: but the present régime cruelly compels them, poor souls, to content themselves somehow with mere thieving.

Sometimes two or three of these wandering native tradesmen at once invade the villa, and open their shops side by side on the piazza, or even overflow into the paths of the garden. To see them install themselves is a comedy in miniature. Slowly, and with dignity, Mohammad Ali unfastens his manifold bags and packs and bundles, while Omar, his attendant, receives the knives and portières and brass lamps at his hands, and lays them out temptingly on the red-tiled floor beside him. One by one the ingenious boxes and rolls and rugs are taken from inside each other in endless confusion, till the entire stock is finally displayed. Then Mohammad Ali squats himself lazily in front, and waits with Oriental patience for custom to come in Allah's good time, while Omar sprawls his lean legs at full length in the sunshine, and dreams that Fatma, and Meriem, and the gazelle-eyed Mouni are leaning over him, obsequious, with coffee and kous-kous.

By and by custom in due time arrives. Allah is great, and news spreads rapidly. The children of the villa rise all agog when tidings reach the school-room that "The Arabs have come!" A mighty shout goes up to heaven. The polite manual of French conversation finds its dog-eared leaves turned face downward on the table, and the Latin grammar falls with its accident unheeded on the African floor, while ingenuous British youth rushes out wildly to enjoy that over-fresh excitement of the eastern merchants. Maturer age strolls slower afield, and conducts its negotiations with due hesitancy. Time in the East was made for slaves. A pipe on such occasions affords a most useful solace and refuge. You, select your goods with slow deliberation, pile them up together casually in a little heap, eye them askance with an inquiring glance, and take a contemplative pull or two at the inspiring weed in solemn silence. Mohammad Ali responds with a puff from his cigarette in grave concert. Then you walk once or twice up and down the piazza slowly, and, jerking your head with careless ease in the

direction of your selected pile, you inquire, as if for abstract reasons merely, in an off-hand tone, your Moslem friend's lowest cash quotation for the lot as it stands.

Two hundred francs is the smallest price. Mohammad Ali paid far more than that himself for them. He sells simply for occupation it would seem. Look at the work, monsieur. All graven brass, not mere *repoussé* metal; or real old chain-stitch, alike on both sides—none of your wretched, commonplace, modern, machine-made embroidery.

You smile incredulous, and remark with a wise nod that your Moslem friend must surely be in error. A mistake of the press. For two hundred francs, read fifty.

Mohammad Ali assumes an expressive attitude of virtuous indignation, and resumes his tobacco. Fifty francs for all that lot! Monsieur jests. He shows himself a very poor judge indeed of values.

Half an hour's debate, and ten successive abatements, reduce the lot at last to a fair average price of seventy. Mohammad Ali declares you have robbed him of his profit, and pockets his cash with inarticulate grumbings in the Arab tongue. Next day, you see in the Rue Bab-Azzoun that you have paid him at least twenty francs too much for your supposed bargain.

That, however, is a very small matter. I prefer the picturesque orientalism of the *marchand chez soi* to the mere Western commonplace of a shop counter, a cash railway, and a fixed price; and I am prepared to pay a trifle extra for the luxury of being waited upon by a descendant of the Prophet. It has such an Arabian Nights' flavor about it when the merchant unrolls his shining bales before my very eyes, that I agree with the children in their profound devotion to the peddling system. What matters a shilling or two more or less if the Bagdad of the Caliphs can still be with us at so low a rate for one brief half hour? I grudge not Hassan or Hamid his dishonest penny. It is worth all the money to see the rugs spread out beneath the shade of the palm-tree, and the glistening eyes of the shrewd old Arab gleaming keen and bright from under the many folds of his embroidered turban at the proffered coin.

Of all the work the merchants bring for sale the most interesting perhaps is the Kabyle jewelry and the Kabyle pottery. These Kabyles themselves are a romantic

people, the last relics of the old aboriginal Berber population, the leavings of Carthaginian, Roman, Vandal, Arab, and Ottoman. From the beginning of time, a light-haired, blue-eyed, European-looking race has inhabited the mountain country of North Africa. These are the Numidians and Mauritians of Massinissa and Juba, the people whom the Phœnicians found as autochthones when Dido landed her first boat's crew at Carthage—a race as white as most Europeans, and a good deal whiter, if it comes to that, than Italians, Spaniards, or Provençal Frenchmen. They are the remnants of the old Christian population which produced Augustine and Symmachus, and so many confessors, martyrs, and heretics. The Arabs came and drove the white men up into the mountains; but there they remain unaltered in appearance to this very day, outwardly Islamized to be sure, yet in instinct and feeling the same primitive European white-folk as ever. They still retain many habits and traditions of the old native and Phœnician art, and the things they make are more original and naive, smack more of the soil, than anything produced in the coastwise towns by sophisticated Moorish or Arab workmen.

Our Kabyle often brings a lot of their metal-work for our approbation—pretty little black trays of hammered steel, adorned, by a rude but effective decorative art, with knobs and bosses of coral and lapis lazuli. These knobs or beads are first let into the black-enamelled background, and then surrounded by pretty coils of wire and steel spring, so as to produce altogether a most curious but beautiful barbaric tracery. I have never seen any of it for sale in New York or London. Equally quaint and antique in type are their brooches and buckles, and the clasps of their belts, sometimes in silver, and sometimes in the same effective combination of steel and coral, but always modelled on graceful and simple traditional patterns. The brooches in particular belong for the most part to that very primitive stone-age type which survives into the age of bronze and iron as the "Tara clasp," and which is common in all early Celtic remains, besides being diffused over the whole world in tumuli and urn burials. Its ultimate elements are a pin and ring, fastened over, buckle fashion, by a slit in the circle. We have wasted a small for-

tune to our handsome Kabyle in exchange for these pretty, glittering red-and-blue baubles. As I raise my eyes from my paper, indeed, in search of hints, they fall upon an ostrich egg suspended lampwise from the Moorish arcade of the window in front of me—a half ostrich-egg, hung by light silver chains from a beam of Atlas cedar, and decorated all round by pointed crescents and dangling pendants of black steel, and this simple coral-work. No prettier or more natural lamp-stand can possibly be imagined, and it is all African, egg and metal-work and coral and decoration.

Kabyle pottery, too, is quaint and pretty in its own wild way; but this you can seldom buy from Hassan or Ali at the villa door. You must go down for it as a rule to one of the dimly-lighted Moorish shops in the old town, where you will find large stocks of it stored away carelessly in an upper chamber, looking down into the arched and tile-covered courtyard. Composed entirely of coarse friable clay, it is too fragile for the itinerant merchant to deal with largely. But the shapes—oh, endless! Rough big pots of simple red earth, daubed with yellow and black by ancestral pigments, in those bars and lines and geometrical forms, which alone the creed of Islam allows its faithful, to the exclusion of all graven images or other representations of anything that is in heaven above or in earth beneath or in the waters that are under the earth. Some of them are tall and lean and lanky, coarse and hand-made, with a charming disregard of straightness or accuracy that would drive a Stoke Newington housewife frantic. Some of them consist of three vases rolled into one, like Mrs. Malaprop's Cerebus, or bulge in the middle to form a clandestine union, a sort of fictile morganatic marriage, with some other pot of alien size and shape and pattern. Here are lamps of the old familiar Roman sort, in forms handed down traditionally from the earliest Greek and Phœnician antiquity; here are funny little jars, like unsteady amphoræ; here are beakers a little one-sided or groggy on the legs; here are weak-kneed tazzas, and unsymmetrical mugs, and jugs that deviate most distinctly from the perpendicular. But all are instinct with native art for all that—no two alike, each one the product of a thinking brain and cunning hands, and

cheap withal, so that for a few francs you can lay in a small illustrative collection of North-African falence. Even the four-penny plates are all different in design and pattern. Not one but has some special little flight of fancy; not one but has given the clever designer individual pleasure in the work of her fingers—for it is the women of Kabylia, not their lords and masters, who make all these beautiful barbaric products.

Let us return once more to our friends in the piazza. See, Hassan holds up to us temptingly a musical instrument, the oldest and simplest ancestral form of harp, or lyre, or guitar, or fiddle. It is nothing but a tortoiseshell, the carapace of the common Greek tortoise that scours at will the neighboring dry hill-sides (why should a tortoise be debarred from scouring?), covered with a bit of dried skin, and fitted with a handle and a couple of strings over a bridge in the centre. This is the true original and only genuine *testudo*, the father of all existing stringed instruments. But the turbaned negro from the extreme south will take one of these primitive and quaint-looking violins, and, running over the notes rapidly with his dusky fingers, will grind out a rapid plantation melody in a way to excruciate the most savage ears. Every visitor to Algiers buys one of these tortoiseshells. I don't know why, but they somehow exert an inexplicable charm over the Western taste. All our people at the villa have invested in an instrument, and at every waking hour of the twenty-four you may listen and catch the sweet strains of some simple song laboriously twanged out in double-slow time from half a dozen rooms in bewildering discord.

There is another form of musical instrument on sale at the door, not quite so popular; it consists of a sort of early drum or ancestral tambourine, copiously adorned with semi-savage decorations in the shape of hanging strips of colored leather. Its chief claim to attention, however, is derived rather from the bloody hand which it bears as cognizance for a sign of good luck on its parchment face. This open red palm, with extended fingers—like the bloody hand of Ulster, still worn as part of the armorial bearings of English baronets (for barbaric details cling to the barbaric aristocracy of England)—figures everywhere “for luck” on Arab

products. It replaces, in fact, as a bringer of fortune, the familiar horseshoe of northern Europe. You may see it in houses, displayed upon the door; you may see it on tombs, on furniture, on ornaments, on stables. It serves to drive away the bad spirits, who object to red hands, and it averts the effects of that evil eye concerning whose influence the Arabs and Moors are so supremely nervous. So far as my own experience goes, in more civilized communities it is the evil tongue rather than that does all the mischief.

One subfusk old fellow, a very dark M'zabite from the borders of the desert, who has sustained a severe injury to his left eye, and whom we all know, therefore, by the Arabian Nights' name of the one-eyed calender (in order, as Dick Swiveller remarked, to make it seem more real and agreeable), comes often up to our hill-side home, with a lordly store of fine old brass-work, and unfolds his stock beneath the cover of the piazza. Trays, big and small, engraved and *repoussé*, the one-eyed calender presses eagerly with oriental commendation upon our notice. Some of the best and oldest have the Arabic letters of their rich design inlaid in silver; and these are really extremely beautiful. They come for the most part nowadays from Tunis, that surviving home of Arab art, for real old Algerian work is at present getting almost priceless. But even the cheap and common trays of the country are exceedingly pretty in a humbler way: their design is always good and intricate, and their workmanship, though coarse, is honest and effective. The ornament invariably just fits itself to its object and its field. There are beautiful shops in Algiers town where Arab workmen still produce, under French masters, fine brass trays of admirable design; and the English architect, who builds the big Mauresque villas that dot the hill-sides for rich runaways from our hateful wet northern winter, has a lovely collection of the real old article that is enough to make the poor amateur's mouth water. I postpone buying more than a single specimen or two of these, however, till after we have got American copyright, or say more succinctly till the Greek Calends. Such things at present are far too dear for mere authors.

The pierced-brass lamps for hanging in halls are also extremely graceful and decorative—indeed, everything here is full of

native art feeling. I am afraid, after some months of living among these exquisitely decorated Moorish interiors, our cold English houses will look horribly bare and vulgar and commonplace. The fact is, that stern Mahommedan prohibition of imitative art, while it has made painting and sculpture impossible for Islam, has almost necessarily produced a wonderful school of pure decorative design unequalled anywhere else in either hemisphere. The best artistic minds of the Mussulman world, debarred by that strange rule from giving their attention to pictures and statues, have perforce concentrated all their originality and all their vigor upon the evolution of a type of decoration which could not fail to be purely geometrical and ornamental in style. The flowing Arabic letters, part cause; part effect of this limitation of subject, have lent themselves admirably to the needs of the artists. Verses from the Koran have had to take the place of men and beasts and flowers of the field. The results produced, when seen in the large, are such as fairly to astonish northern visitors who have only known oriental art before from the piecemeal scraps one finds here and there in museums or drawing-rooms in civilized countries. It is something quite different and dazzling to enter and gaze round upon one of the beautiful old Moorish houses, oriental throughout in character and ornament, with its arcades and courtyards and tiles and draperies; and to see how harmoniously the whole effect blends together, and how exquisitely every detail fits in with the sunlight, the climate, the architectural plan, and the decoration generally. To come to Algiers for a winter, and visit some of these lovely houses, is in itself an artistic education; he must have a dull eye and brain indeed who does not return to Europe or America, from that great living school, with all his ideas on ornament in art profoundly modified or even revolutionized.

The houses, indeed, lend themselves wonderfully to decoration in a way unknown among our square-roomed, square-windowed, straight-and-above-board northern architecture. We in Europe and America have no rambling holes and corners: here, the niches and alcoves, with their mysterious shade and poetical gloom, the horseshoe arches with their broad room and occasion for drapery, the Saracenic

tracery-work of the plaster roofs, the tiled floors covered with rich eastern rugs and thick soft carpets, all form a consistent framework which, for richness and variety of ornamental effect, can never be equalled under our cold gray northern skies and wintry light. This land ought surely in the future to be prolific in painters, for everything is arranged just as a painter would have wished to see it. And it is to rooms like these, with their niches and archways, that the one-eyed calender's brass-work, or Hassan the Kabyle's graceful embroideries, and the thousand-and-one knick-knacks of the Thousand-and-one Nights are best adapted. You buy a few bits of green and light yellow Morocco pottery from some picturesque Tangier Jew in his dark blue jacket at some stall in the town; you stick them in the sunlight on a carved and painted Moorish *étagère*, or stand them in the recess over the carved door of some in-let cupboard; you intersperse with them a couple of cheap but graceful Kabyle plates, or a beaten brass vase or two from the old Moor in the shop by the mosque; and the whole thing when arranged looks as lovely in its way as if you had paid twenty pounds a piece for the pretty baubles at Liberty's. But how they would look on an English wall and with a Morris wallpaper for their varied background I can hardly say: good, no doubt, but many degrees less good, I fancy, than against the brilliant white-plaster tracery of Algeria, or the pale blue distempered field of this simple dado in a Moorish villa.

As a tropical or sub-tropical style of building, indeed, nothing could be more perfect or more admirable in its own way than Moorish architecture. Some day, when people begin to be wise, it will be adopted, perhaps, for their own homes by the cultivated classes in Queensland and Jamaica, in Georgia and Florida. Southern houses are built at present in a style slightly modified from the one rendered necessary by totally unlike northern requirements: they are alien exotics in low latitudes: here alone you have a type of house evolved expressly for a warm climate, and adapted in every detail to its peculiar environment. Without, the sun is beating down mercilessly upon arid plain and dusty white roadway. You turn under a great arch in some high brick wall, and hi, presto! you find yourself at once in a cool and spacious

paved outer courtyard, girt round by arcades of shady gloom. In its centre, an old-world marble fountain feeds a square tiled tank, where lush waterweeds rise high and green from the shallow water into the open air. A clump of date-palms or a couple of ancient shady orange trees cast flickering shadows on the cool green and white tiles of the solid flooring. A piazza surrounds the court on every side—Saracenic arches supported at intervals by twisted columns of pure white marble or solid freestone, their capitals carved into quiet curves with almost Ionic simplicity of design and outline. A string-course of priceless tile-work in dainty antique colors—faded yellow and green—surmounts the arches; the round-topped doorway, with its exquisite mouldings, stands on one side, in the coolest and shadiest corner, where the visitor need not linger unduly under the burning rays of a hot African sun. Attention to these little details of precautionary politeness is a graceful tribute to the comfort of one's guests; a water-trough stands even at the door for the dogs, and its breezy inscription, no doubt, informs one in choice Arabic that a merciful man is merciful to his beast.

You enter the house, and find yourself in the roofed inner court, or *impluvium*, the living and reception room in many Moorish villas, with its upper story richly balustraded and arched, and its glass roof protected by matting from the heat and glare of the midday sun. How charming and quaint these inner courtyards can be made with hangings and tiles and wood-work, or with draperies richly shot with web of gold, I can hardly tell you; the hanging lamps, the inlaid tables, the brass and silver trays, the richly carved brackets, that elsewhere look perhaps a trifle affected, fit in here to absolute perfection with all the rest of the decorative style as parts of whose total they were originally developed. Not a tablet of plaster let into a niche, but bristled with intricate open lattice-work; not a square inch of floor or lintel or doorway but shows the living touch of a true artist. In many houses the entire front of the principal reception-room consists of successive arched windows, opening out upon the subdued light of the arcaded courtyard; and the upper part of each window, from the point where the arch springs from the capital of its carved pilasters, is wholly occupied with trellis-work of stone or of

the beautiful compact and stone-like Moorish plaster. In some cases, the wall space between the arches consists throughout of flat encrusted plaster in exquisite interlacing oriental designs, while the roof is formed of pendant lace-work in the same material and with the same admirable richness of minor detail displayed in every part.

"But all this decoration implies untold wealth! It can only be procured by people who have absorbed, through fair means or foul, far more than their due personal proportion of the world's riches!" Not at all necessarily. If it were so, I for one could only speak of it all with utter condemnation. I have not so learned political economy and social science. Barbaric ostentation of exceptional wealth is the vulgarest outrage still committed by people who ought to possess taste and culture upon the mass of our modern democratic societies. When over-rich nonentities endeavor to extort cheap admiration by showing us in their houses, dress, and equipage, how much their badly-spent money will buy, it is the place of all honest and well-affected citizens to pass by unheeding on the other side. But the great point to impress upon the world is really this, that beauty costs no more after all than ugliness. In many cases it actually costs a great deal less. Good plain work in a severe style is not so expensive as solicitous curves and twists and knobs and wriggles. Stern simplicity often produces far better effects than so-called ornament. And even in a highly decorated style like the Moorish, the money spent on encouraging honest and artistic workmanship is saved on the prime cost of the usually simple and inexpensive materials—brass, wood, clay, plaster. It is better to pay men a fair wage for moulding gypsum and carving oak than to pay them for the essentially gambling occupations—for hunting useless ivory, toiling in mines for barbaric gold, or imperilling their lives in search of pearls and diamonds and other special materials which derive almost all their economic and all their artistic value from the peculiar difficulty of discovering or obtaining them.

As a matter of fact the most beautiful of all the Moorish interiors I have seen was all but entirely decorated throughout by its own possessor, a busy man, in the intervals of leisure afforded him from time

to time by his professional engagements. With his own hands, the owner of that house painted, carved, and arranged the whole; with his own fingers he let in the beautiful marble mosaics into the wall, and cut out from planks of honest local cedar the exquisite fretwork decorations that fill up and diversify the archways of the windows. No Arab workman could have a truer or deeper feeling for Arab art; no idle man with all the day on his hands could find so much leisure for a casual handicraft as this hard-worked official has managed to steal in stray half hours from the constant calls of a harassing occupation. It is easy to make a home beautiful if you will only try to do it yourself. Art after all is no mystery. A few pots of

paint, a few planks of pine, a few model sheets of good oriental patterns, a few scraps and squares of tile or marble, and you can turn out with a little patience and perseverance work as rich and dainty as the Alhambra itself. Let nobody think that intricacy of pattern necessarily means expense and luxury: it means merely time, taste, and industry. With fifteen shillings, and the spare evenings of a single month, any man or woman possessed of average brains and fingers can make and set up an oriental cabinet or corner cupboard that would be cheap indeed at a shop for twenty guineas. *Experto crede.* And go thou and do likewise.—*Gentleman's Magazine.*

### A BALLAD OF EAST AND WEST.

BY YUSSUF.

KAMAL is out with twenty men to raise the Border side,  
And he has lifted the Colonel's mare that is the Colonel's pride:  
He has lifted her out of the stable-door between the dawn and the day,  
And turned the calkins upon her feet, and ridden her far away.  
Then up and spoke the Colonel's son that led a troop of the Guides:  
"Is there never a man of all my men can say where Kamal hides?"  
Then up and spoke Mahommed Khan, the son of the Ressaldar,  
"If ye know the track of the morning-mist, ye know where his pickets are."  
"At dusk he harries the Abazai—at dawn he is into Bonair—  
"But he must go by Fort Monroe to his own place to fare,  
"So if ye gallop to Fort Monroe as fast as a bird can fly,  
"By the favor of God ye may cut him off ere he win to the Tongue of Jagai.  
"But if he be passed the Tongue of Jagai, right swiftly turn ye then,  
"For the length and the breadth of that grisly plain is sown with Kamal's men."

The Colonel's son has taken a horse, and a raw rough dun was he,  
With the mouth of a bell and the heart of Hell and the head of the gallows-tree.  
The Colonel's son to the Fort has won, they bid him stay to eat—  
Who rides at the tail of a Border thief, he sits not long at his meat.  
He's up and away from Fort Monroe as fast as he can fly,  
Till he was aware of his father's mare in the gut of the Tongue of Jagai,  
Till he was aware of his father's mare with Kamal upon her back,  
And when he could spy the white of her eye, he made the pistol crack.  
He has fired once, he has fired twice, but the whistling ball went wide.  
"Ye shoot like a soldier," Kamal said. "Show now if ye can ride."

It's up and over the Tongue of Jagai, as blown dust-devils go,  
The dun he fled like a stag of ten, but the mare like a barren doe.  
The dun he leaned against the bit and slugged his head above,  
But the red mare played with the snaffle-bars as a lady plays with a glove.  
They have ridden the low moon out of the sky, their hoofs drum up the dawn,  
The dun he went like a wounded bull, but the mare like a new-roused fawn.  
The dun he fell at a water-course—in a woful heap fell he,—  
And Kamal has turned the red mare back, and pulled the rider free.  
He has knocked the pistol out of his hand—small room was there to strive—

" 'Twas only by favor of mine," quoth he, " ye rode so long alive ;  
 " There was not a rock for twenty mile, there was not a clump of tree,  
 " But covered a man of my own men with his rifle cocked on his knee.  
 " If I had raised my bridle-hand, as I have held it low,  
 " The little jackals that flee so fast were feasting all in a row ;  
 " If I had bowed my head on my breast, as I have held it high,  
 " The kite that whistles above us now were gorged till she could not fly."

Lightly answered the Colonel's son :—" Do good to bird and beast,  
 " But count who come for the broken meats before thou makest a feast.  
 " If there should follow a thousand swords to carry my bones away,  
 " Belike the price of a jackal's meal were more than a thief could pay.  
 " They will feed their horse on the standing crop, their men on the garnered grain,  
 " The thatch of the byres will serve their fires when all the cattle are slain.  
 " But if thou thinkest the price be fair, and thy brethren wait to sup,  
 " The hound is kin to the jackal-spawn,—howl, dog, and call them up !  
 " And if thou thinkest the price be high, in steer and gear and stack,  
 " Give me my father's mare again, and I'll fight my own way back !"

Kamal has gripped him by the hand and set him upon his feet.  
 " No talk shall be of dogs," said he, " when wolf and gray wolf meet.  
 " May I eat dirt if thou hast hurt of me in deed or breath.  
 " What dam of lances brought thee forth to jest at the dawn with Death ?"  
 Lightly answered the Colonel's son : " I hold by the blood of my clan ;  
 " Take up the mare for my father's gift—she will carry no better man !"  
 The red mare ran to the Colonel's son, and nuzzled against his breast,  
 " We be two strong men," said Kamal then, " but she loveth the younger best.  
 " So she shall go with a lifter's dower, my turquoise-studded rein,  
 " My brodered saddle and saddle-cloth, and silver stirrups twain."

The Colonel's son a pistol drew and held it muzzle-end,  
 " Ye have taken the one from a foe," said he ; " will ye take the mate from a friend ?"

" A gift for a gift," said Kamal straight ; " a limb for the risk of a limb.  
 " Thy father has sent his son to me, I'll send my son to him !"  
 With that he whistled his only son, that dropped from a mountain-crest—  
 He trod the ling like a buck in spring and he looked like a lance in rest.  
 " Now here is thy master," Kamal said, " who leads a troop of the Guides,  
 " And thou must ride at his left side as shield to shoulder rides.  
 " Till Death or I cut loose the tie, at camp and board and bed,  
 " Thy life is his—thy fate it is to guard him with thy head.  
 " And thou must eat the White Queen's meat, and all her foes are thine,  
 " And thou must harry thy father's hold for the peace of the Border-line,  
 " And thou must make a trooper tough and hack thy way to power—  
 " Belike they will raise thee to Ressaldar when I am hanged in Peshawur."

They have looked each other between the eyes, and there they found no fault,  
 They have taken the Oath of the Brother-in-Blood on leavened bread and salt ;  
 They have taken the Oath of the Brother-in-Blood on fire and fresh-cut sod,  
 On the hilt and the haft of the Khyber knife, and the Wondrous Names of God.

The Colonel's son he rides the mare and Kamal's boy the dun,  
 And two have come back to Fort Monroe where there went forth but one.  
 And when they drew to the Quarter-Guard, full twenty swords flew clear—  
 There was not a man but carried his feud with the blood of the mountaineer.  
 " Ha' done ! ha' done !" said the Colonel's son, " Put up the steel at your sides !  
 " Last night ye had struck at a Border thief—to-night 'tis a man of the Guides !"

*Oh, east is east, and west is west, and never the two shall meet  
 Till earth and sky stand presently at God's great Judgment Seat.  
 But there is neither east nor west, border nor breed nor birth,  
 When two strong men stand face to face, though they come from the ends of the earth.*

—Mocmillan's Magazine.

## LITERARY NOTICES.

**EVERY-DAY BIOGRAPHY.** Containing a Collection of Brief Biographies for Every Day in the Year, as a Book of Reference for the Teacher, the Chatauquan, and Home Circles. By Amelia J. Calver. New York: Fowler & Wells Co.

Those very brief biographical notes are arranged by the date of birth of each subject. The book contains upward of four hundred pages, and as there are three hundred and sixty-five days under which subjects are classed, it will be readily seen that the number of people falls very far short of those who should come in under such a plan. We doubt the utility of such a book in any case, even for the unlearned and illiterate class, who would have few, if any, books at home. But if the value of the plan be admitted, it should have been carried out on a very much more complete scale to possess any thoroughness. The basis of classification, too, is a bad one. Needs of reference grow out of the wish to find out the facts concerning the person, and the classification should be by names. To find the facts concerning Tolstoi, the Russian novelist, for example, one will be compelled to turn over all the pages of the book till he reaches page 207. This makes such a work nearly worthless for reference, and certainly it has no value for any other use.

**THE PSYCHIC LIFE OF MICRO-ORGANISMS.** A Study in Experimental Psychology. By Alfred Binet. Translated from the French by Thomas McCormack. With a preface by the author written expressly for the American edition. Chicago: Open Court Publishing Co.

Binet belongs to that school of biologists who deny that the phenomena of life, even in the lowest beings, can be explained by the working of physico-chemical forces. Even in the Infusoria, for example, the faculty of seizing food and of exercising a choice among foods of different kinds proves something beyond the mere mechanism of organization. If the existence of psychological phenomena in lower organisms is denied, it becomes necessary to assume that these phenomena are superadded in the course of evolution, in proportion as organism becomes more perfect and complex. This is branded as inconsistent with the teachings of general physiology, which shows us that all the vital phenomena

are previously present in undifferentiated cells. The arbitrary way in which biologists have limited the development of the intellectual powers excites our author's criticism. According to Romana, for example, only protoplasmic movements, such as excitability, are noticeable in lower class organisms. His division quite arbitrarily assigns the first evidence of memory to the echinoderms; the primary instincts to the larvae of insects and the annalids; the secondary instincts to insects and spiders; and finally the beginnings of reason to the higher crustaceans.

Mr. Binet labors, and not without success, to show that the evidences of psychological action are clearly to be perceived in the lowest orders of animal life. As an interesting instance of this may be cited the case of one of the Rhizopods, the *diffugia urceolata*. This little creature, inhabiting a shell formed of particles of sand, emits long feelers, which search at the bottom for the materials necessary to construct a new case for the filial organism, to which it gives birth by division. The pseudopod or tentacle seizes a piece of sand, which passes into the body of the animal. All this shows preadaptation to a remote end, and therefore the act has the marks of an instinct.

The author pursues his studies of the lower organisms with great acuteness, and these examinations of the lesser organisms perhaps reveal as interesting facts in nature as we are accustomed to associate only with the higher orders. Binet's name is brilliantly known in science, and this little work will not lessen the esteem in which he is held.

**IN THE BEGINNING; OR, STORIES FROM THE BOOK OF GENESIS.** By Annie R. Butler, author of "Children's Medical Mission Stories." With thirty-nine illustrations. Philadelphia: J. B. Lippincott Co.

The title of this Bible juvenile shows precisely what it is—a collection of short stories told in a pleasant way, based on the accounts of Genesis, covering all the more striking events and incidents down to the adventures of Joseph in Egypt. These legends are among the most charming in the sacred folk-lore of the nations, and no child ever failed to read or listen with absorbed interest. The children's Bible is the name which has been given to the first book of the Pentateuch, and cer-

tainly it is appropriate, for it appeals irresistibly to the childish imagination. The illustrations are good, and the execution, on the whole, all that could be desired

#### FOREIGN LITERARY NOTES.

PROFESSOR JAMES DARMESTETER has nearly finished his great collection of Afghan songs with prose translations into French. The Afghan texts have never before been written down, much less printed. Bound up with them will be an Afghan grammar and dictionary. It seems strange that all this should be left for a Frenchman to do when we have such a vital interest in Afghanistan. The book is complete now except the introduction, and the learned author hopes that it will be out of hand by the new year.

"The feeling of dissatisfaction which we have mentioned," says the *Athenæum*, "was felt by many who attended the Oriental Congress at Stockholm has led to the issue of a circular pointing out the desirability of holding the next congress at Paris or London, and endeavoring to return to the scientific objects of the meeting. It has already been extensively signed."

At the public session of the Academy of Sciences at Munich on the 15th inst. the venerable president, Dr. von Döllinger, read a paper on the dissolution of the Order of Templars. The tendency of the paper was to vindicate the character of the Templars. Its historical fulness, critical power, and manner of delivery showed that Döllinger's capacity for work and keen delight in it are still undiminished, notwithstanding his ninety-one years.

CONCURRENTLY with the appearance of the third English edition of Professor Rudolph von Gneist's "History of the English Constitution" and the second English edition of his "History of the English Parliament," the venerable author has been celebrating his jubilee as a teacher in the University of Berlin. He gave his first lesson on November 18th, 1839, and throughout the following half century has continued his lectures without a single break—"ohne in dem halben Jahrhundert eine einzige Vorlesung versäumt zu haben." Such a fact is perhaps with out a parallel in academical history. The "Jubilar" received congratulations and addresses from universities and literary societies in all parts of the world.

"It has come to the knowledge of Messrs. Macmillan & Co., who hold the copyright of the works of the late Edward FitzGerald," says the *Athenæum*, "that an American reprint of Omar Khayyám has recently been on sale in this country. It is only fair to warn likely purchasers that this reprint is a piracy, and liable, as such, to be seized by the owners of the copyright. The Custom House authorities have been requested to stop the entrance of the book into this country."

THE Marquis of Lorne has, it is said, written a Canadian love story, which will appear shortly in the new weekly journal *Now*, published in Glasgow. The tale contains pictures of life in the North-West and elsewhere in Canada, some scenes being introduced in connection with the late Indian rising. The hero is a young and well-educated Canadian, who becomes enamored of the daughter of an Indian chief.

A BOOK of considerable importance in literary history is announced for publication—the letters of Friedrich Schlegel to his brother August Wilhelm Schlegel. It has long been known that the Dresden Library was in possession of these letters. The originals were intrusted to Dr. Wetzel as editor, who has now completed his work.

"At the last meeting of the Council of the Camden Society," says the *Academy*, "it was resolved to issue for the year 1890-91 (1) the accounts of Henry Earl of Derby, afterward Henry IV., during his travels in Prussia and elsewhere; to be edited by Miss Lucy Toulmin Smith, with the co-operation of the Historical Society of East Prussia; (2) the Clarke Papers, vol. i., to be edited by Mr. C. N. Firth. The first of these books will throw light upon the travelling expenses in the east of Europe of one who took much the same route as that of the Knight in the "Canterbury Tales;" the other will bring forward most important evidence bearing on the aims of the army and on the character of its leaders, more especially on that of Cromwell, after the conclusion of the first Civil War."

THE death of the English poet Allingham, familiar to all lovers of recent English verse for his command of homely pathos and sweetness, is thus recorded, with a sketch of the poet's life, in the *Academy*: "Mr. William Allingham—whose death was briefly recorded in the *Academy* of last week—was born in 1828 at the little seaport of Ballyshannon, Donegal, in which county his ancestors had, we believe,

been settled for several generations. While quite a young man he began to contribute verses to English periodicals, and was thus introduced to literary society in London. His first volume of collected poems appeared in 1850; and this was followed four years later by 'Day and Night Songs,' a subsequent edition of which was illustrated with drawings by Rossetti, Millais, and Arthur Hughes. His most ambitious work was 'Lawrence Bloomfield in Ireland' (1864)—an attempt to narrate, on almost epical scale, the endeavors of a young landlord to improve the condition of his tenantry. But his poetical reputation will rest upon his shorter lyrics, many of which—apart from their metrical charm—are inspired with a genuine love of nature and with homely pathos. Of late years Mr. Allingham had published little that was new, being content to bring out revised editions of his earlier volumes, with a few additional pieces. One of such volumes he is understood to have left ready for the press.

"In 1864, Mr. Allingham—who had previously held a subordinate appointment in the Customs—received a pension of £60 on the Civil List, 'in consideration of the literary merit of his poetical works.' Among the pensioners of the same year are to be found the names of Miss Eliza Cook, Mrs. Sheridan Knowles, and Miss Dinah Mulock. In 1874, he married the well-known water-color painter, Miss Helen Patterson, who, besides several children, survives him. In the same year he was appointed editor of *Fraser's Magazine*, in succession to J. A. Froude; and at about this date he settled at Chelsea, in the immediate neighborhood of Carlyle and Rossetti. On resigning the editorship of *Fraser's* he moved to Witley, in Surrey—a district dear to artists and authors. It was only in the present year that he moved again to the house in Lyndhurst-road, Hampstead, where he died (after a lingering illness) on Monday, November 21st. In accordance with his express wish, his remains were cremated at Woking."

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#### MISCELLANY.

**THE NEW TRADES-UNIONISM.**—Along with a re-casting of our whole political system into democratic form, there has gone during the last twenty years an immense movement in social philosophy and social politics. The Commune in France, the land struggle in Ireland, the growth of Socialism on the Conti-

ment, the teaching of Karl Marx, Henry George, Mill, Comte, and those whom each of these has influenced, have continually broken up the old economic purism, the gospel of *laissez faire* and unlimited license to individual selfishness. Along with these have worked an immense body of organized movements, with many different schemes and with widely divergent creeds, such as the Salvation Army, Toynbee Hall, Newton Hall, the Social Democratic Federation, the Land Nationalization Societies, and all the other agrarian movements in Ireland, Scotland, Wales, and England, with Guilds, Leagues, and societies innumerable; such inquiries as those of the Industrial Conference of 1885, Mr. Charles Booth's Analysis of Labor in East London, 1889, the Trades-Union Annual Congress, and all the various types of Christian Socialism that are weekly preached in Church and Chapel. Socialism in any systematic or definite form, as a scheme for superseding the institution of Capital, had not in my opinion made any serious way. At least I know of no coherent scheme for eliminating individual ownership of property which can be said to have even a moderate following of rational and convinced adherents. The enthusiasts who, here and there, put forth such schemes are not really understood by those whom they get to listen to them. But Socialism, as meaning the general desire to have all the arrangements of society, economic, legislative, and moral, controlled by social considerations and reformed to meet paramount social obligations—this kind of Socialism is manifestly in the ascendant. Such Socialism, I mean, as is found in Henry George's powerful book called "Social Problems," where we have his view of the problem apart from his sophistical "remedy." The old Satanic gospel of *laissez faire* is dead; and, in the absence of any other gospel of authority, a vague proclivity toward Socialism comes to the front. Whatever name we give it, a settled conviction has grown up in the conscience of serious men of all schools, that society in its present form presses with terrible severity on the whole body of those who toil in the lowest ranks of labor. And from Bismarck and the Pope downward all who bear rule, and all who teach, are coming to feel that society is in a very rotten state while that continues. We are all waking up to see (what many of us have been preaching for years) that it will not do, and must be mended or ended. Hence when 100,000 men along the river side rose up to protest against

their casual employment and their miserable pay, the world very generally, both of rich and poor, thought that they were right, and gave them encouragement and help. People knew something definite about the East End and London Labor. The Mansion House Committees, the House of Lords Committee on Sweating, the Royal Commission on the Housing of the Poor, the Industrial Conference of 1885, the experiences of Beatrice Potter, the studies of Charles Booth and his friends, and all that for years has been said and done in Toynbee Hall, Bedford Chapel, Newton Hall, the Working-Men's College, the Hall of Science, the City Temple, and a thousand platforms, pulpits, and clubs—had made men think and given them matter for thought. Public opinion has passed over to the side of the laborer; and when he made his effort, public opinion helped him to success.

There are lessons enough for every one in what has just happened. The Socialist of the Karl Marx School may reflect how sterile a thing Socialism has proved all these years that it has been raving out its fierce conundrums about the wickedness of private property, and how solid are the results to be won when it consents to enter on a practical business bargain. The violent assailants of Trades-Unionism may reflect that they have done nothing practical, until they resorted to Unionism themselves and adopted its familiar tactics and its well-tried machinery. The old Unionist may reflect that, in forty years past, the conventional Unionism has proved utterly powerless to effect what in a few weeks two or three prominent Socialists have done. The men who grow hoarse in declaiming about the selfishness and brutality of the middle-classes may think of the solid assistance they had from the middle-classes in sympathy and in money. And the middle-classes, who were wont to regard the East-End laborer as a feckless or dangerous loafer, may ponder on the discipline, honesty, endurance, and real heroism which, in defence of what they knew to be a just cause, so many thousands of the poorest of the poor have shown. The Socialist with a system and the impatient reformer generally have often turned with mockery from all reliance on public opinion and from any such doctrine as "the moralization of industry." When they have been told that—"the true Socialism is this: the use of Capital must be turned to social objects, just as Capital arises from social combination:"—when it has been preached to them that "*industry must be mor-*

*alized by opinion, not recast by the State—moralized by education, by morality, by religion*"—the Socialist with a system and the impatient reformer goes off with a laugh or a sneer. Well! but this is what has just happened. Public Opinion has been changed, and it has worked great results. Capital, to a certain extent, has been moralized, and Industry also has been moralized. The very poor have been taught to feel self-respect and self-reliance, to bear much for a common cause, to practise self-denial for a social benefit. The rich have been taught to listen with more sympathy to the poor, and to know themselves as responsible for the sufferings of those they employ. What has happened is a great lesson to rich and poor, to employers and employed, in the imperishable and paramount force of Social Duty in the long run. The immediate results are not very great. But it is a beginning: and much may come of it. In the mean time, the persistent appeal to the public conscience on moral and social grounds has done, what Trades-Unionism, *per se*, has failed to do in forty years, and what all the schemes for confiscating private Capital and nationalizing private property have only succeeded in hindering and delaying being done.—*Nineteenth Century.*

THE LEPERS OF CRETE.—If uncleanness be the chief factor in the generation or promotion of leprosy, one may well understand why there are so many lepers in Crete. The science of hygiene is not studied in the East as with us. The traveller who stays but a day in any of the large Cretan villages will not soon forget his experience of the prevalent filthiness. There is a reek of ordure in the air that tells very decisively how sanitary arrangements are totally neglected; and this in spite of a clear stream of water from the mountains running down the streets, and the sweet perfume of the blossom of orange and lemon trees in the gardens. The houses are, as a rule, clean enough outside, but they are of the whited-sepulchre order of things. Within, if the building be of but one story, the floor is the native ground. During the rains, therefore, when the soil is saturated, and the urban sewage is absorbed by the earth as if it were a sponge, foul exhalations poison the houses. Fevers are the certain consequence; and constitutions weakened by successive attacks of fever or with a scrofulous tendency are, it may be imagined, well prepared for the insidious approach of leprosy also. The disease is very

rare in the large towns, in Greece as in Crete. That may be, in a measure, explained by the greater regard for cleanliness in the public places, by the paved streets, and by the necessity there of some more enlightened way of disposing of the sewage.

The country Cretans are as reckless in their diet as about the condition of their houses and the surroundings. They are not gluttons; the Christians among them conform strictly to the fasts of the Greek Church, which forbid them to eat meat on about two hundred days in the year, but they are fond of the very things which tend to foster leprosy. As good Christians, they consume an immense quantity of salt fish, which journeys to their island from the north seas, after divers transshipments which do not improve it as an article of food. Crete being so productive in olive trees (in 1883 the island exported 19,500 tons of olive oil, worth no less than £567,000), oil is so plentiful that they use it in excess. Their passion for pork, especially in the form of sausages of an inferior kind, which they eat summer and winter alike, is perhaps the crowning evil. In certain parts of Greece, where the oil is of good quality, there are no lepers; in the contrary case, lepers are common. This applies also to Crete, where the processes of crushing and refining the oil are very primitive. The country Cretans cook almost everything in oil, they even add oil to the milk of a rice pudding; but, as if in defiance of absolute rules about this disease, we find a certain village high up on the slopes of Mount Ida peopled entirely by shepherds who live on the produce of their flocks and use oil but scantily, and who nevertheless suffer much from leprosy. It seems doubtful whether wine is in any degree a deterrent or a provocant of the disease. The Cretan Christian men are, upon the whole, rather bibulous; but not so the women. Further, the men lead more active lives, in times of insurrection have more to harass them, and, generally speaking, incur more risks than the women. This may account for the greater number of male than female lepers. The Moslem Cretans suffer much less from the disease than their Christian compatriots. They certainly consume plenty of oil; but they are cleaner in personal matters, they abhor pork, and they eat less salt fish. In one district, however, that of Monophatsi, Mohammedan lepers are somewhat common; but the Moslems of this community are notorious for their loose observance of the injunctions of the Koran, and their in-

difference in diet and cleanliness fairly explains why they suffer.

We have applied the word "patients" to the lepers of Crete. In their case the word indicates them as suffering men and women, not as persons under constant medical treatment. Indeed, the current belief that the leper is incurable seems to exempt them from the need of such attentions. It is supposed that the disease may be retarded slightly by arsenical treatment, sulphur baths, and "a rigorous application of the rules of health;" but even this is not certain. There are no leper hospitals in the island. At one time there was talk of segregating all the lepers upon one of the adjacent islets; but, as might have been expected, so active a measure has eventuated in nothing. Indeed, for the sake of the lepers themselves, one may be glad of it. The community at large might benefit; there would be less opportunity for the spread or even continuance of the disease, but the miserable victims would be deprived of the measure of entertainment which, as spectators of the lives of others, they certainly still obtain. They would have nothing to occupy them except the recollection of their own misery. They might even sink to the degree of torpor and degradation that seem to characterize the lepers of Robben Island. As it is, however, the person whom the municipal or provincial doctor certifies to be a leper, though he is at once compelled to leave his home and join the other lepers of the nearest "leprochorion," continues to have a certain spectacular interest in life. The "leprochorion" is close to the gates of the city. There is constant passing to and fro in front of his little white house of a single room. Nor is he shunned altogether by his earlier friends and acquaintance, though he is separated from them. If he had property before his exile, his sentence as a leper does not deprive him of it. His estate is administered for him by others, who are responsible to him for the returns. If, on the other hand, he is indigent, the public treasury allots him a loaf of bread daily as long as he lives, and the alms he receives from wayfarers enables him to supplement this allowance with some of the minor luxuries of life. There is less of the apathy of despair in a Cretan leper village than one would suppose. The lepers themselves realize that they have the sympathy of their fellow-creatures.—*National Review*.

**DANGERS OF RAW MILK.**—Careful observers, who are by no means inclined to the creation

of public "seares," are decidedly of opinion that there is a considerable degree of danger in the use of uncooked milk as food. It is believed that not only are certain exanthematous fevers communicated to consumers of raw milk, but that tubercle itself, in some of its forms, may also arise in the human subject in this way. An important paper was recently read at the Pathological Society of London, by Mr. Shattock, on "Tubercular Abscess of the Breast." In the course of the paper, it was stated that in the cow "tubercle of the udder" was a well-known disease, so much so that on the Continent its hygienic importance was generally and practically recognized. Ten or twelve years ago the minute structure of the tubercle bacillus which is found in the cow's udder was figured and described by Kossel in *Virchow's Archiv*. It was found also by experiments on animals that the milk from tuberculous udders contained bacilli and was rapidly infectious. Most people are familiar with what is popularly known as "consumption of the bowels" in children. Dr. Hamilton, a distinguished Aberdeen professor, has expressed the opinion that tuberculous milk from cows may often be the cause of that distressing and fatal malady. In this connection a case is recorded of a perfectly healthy child, born of equally healthy parents, which was given to a wet-nurse to be suckled. The woman was tubercular, and the child very quickly contracted tubercular meningitis and died. The nurse's milk, on examination, was found to contain the bacilli of tubercle. The disease, tuberculosis, it is believed, can be present in an animal or a human subject without being definitely localized as an anatomical entity in any particular organ. It may therefore easily happen that a cow shall continue to be milked for months, and her milk sold as food for infants and others, before it is discovered that she is the subject of fatal and infectious disease. Certain breeds of cows are supposed to be especially liable to tubercle of the udders, and those breeds are noted for their large udders, and for the abundance of the milk which they yield. Such breeds and animals are, not unnaturally, much sought after by dairymen, and the extent of the danger is thus increased. All this sounds sufficiently alarming, but whatever conclusions may be drawn from it, one point of practical importance should certainly not be overlooked. That point has often been urged by medical men, and it must continue to be urged again and again. It is that milk should not be taken

raw, but boiled. Milk needs to be cooked as much as beef or pork. Many persons, school-boys especially, profess a strong objection to cooked milk. That is probably because no skill is exercised in the cooking. It may be cooked in half a dozen different ways; but two, at any rate, of these are so simple that it is inexcusable not to try them. A little sugar added to milk when boiling gives it quite a new flavor, and makes it to many boys more palatable than uncooked milk. For those who do not like what is sweet, a pinch of salt may be put in; and that, again, produces a substance having a totally different taste from plain boiled milk. Other methods of making cooked milk palatable will suggest themselves to the conscientiously careful mother or to the experienced cook. There can be no good reason why anybody should be asked to take raw milk; still less ought there to be any excuse for preferring it raw on the ground that when cooked it is less palatable.—*Hospital*.

**AINHUM, A BRAZILIAN DISEASE.**—Ainhum was first systematically described by a Brazilian surgeon as attacking colored races in Brazil. The merit of its actual discovery, as Dr. Radcliffe Crocker and others have pointed out, is due to Dr. Clarke, who described the disease before the Epidemiological Society, in 1860, as a dry gangrene of the little toe among the natives of the Gold Coast. Dr. Da Silva, Lima, however, described ainhum as a disorder long known as existing among Africans and Creoles in South America, first writing about it in the *Gazeta Medica de Bahia* in 1867. Ainhum consists in hypertrophy and degenerative changes in the little toe, a constriction forming and slowly becoming deeper until the digit is amputated spontaneously or otherwise. The disease is often symmetrical, and may last for years. It is now known that the fourth, or even the great toe, may be affected, and Egles describes a case where a finger was attacked. It is frequent near Bahia, and also occurs in the Southern States of America, the West Indies, the West Coast of Africa, India (where Hindoos are also liable to the disease), Réunion, and Nossi-bé. M. Cognes has described a case of ainhum, which occurred in Madagascar, in the March number of the *Archives de Médecine Navale*. The pathology of ainhum is obscure, and although spontaneous amputation of digits is a feature in some forms of leprosy, it is by no means certain that the two diseases are closely allied.—*British Medical Journal*.

# House-cleaning

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1890.

THIS number of the *ECLECTIC* begins the fifty-first volume of the new series, which was begun in 1865.

As the first series was begun in 1844, the present year is the forty-sixth year of its publication.

During the last year the change of date was made in the publication from about the 20th of the month to some ten days later, the object being to give to our readers one month's later extracts from foreign sources. As the foreign magazines usually arrive here about the 12th of the current month, we are thus enabled to give to our readers at the end of the month their contents, instead of, as we formerly did, the contents of the magazines of the previous month.

We hope our subscribers will bear the fact in mind that though they now receive the *ECLECTIC* some ten days later than formerly, they are actually getting matter one month earlier.

With this number we have also made a change in our cover, following the more modern plan of giving our contents on the outside of the magazine, where it can be seen at a glance.

We shall, during the new year, adhere to our present plan of giving from all sources the most interesting articles to American readers of foreign current literature.

We shall be glad to make liberal arrangements with any intelligent persons who would like to canvass for the *ECLECTIC* in any location.

**HOW TO GET RID OF A COLD.**—It may not be as widely known as it deserves to be (writes a correspondent of the *British Medical Journal*) that twenty grains of salicylic acid, given in liq. ammon. acet. three or four times a day, will so far control a common cold that the aching of the brow, eyelids, etc., and movements of the eye, will cease in a few hours, while the sneezing and running from the nose

will also abate and will disappear in a few days, and, more fortunate still, the cold will pass off and not finish up, as is customary, with a cough.

**EDISON LABORATORY.**—According to a recent writer, Edison's laboratory contains samples of every substance in the world. The thousands of pigeon holes and drawers contain skins, feathers, and furs of the whole animal creation, bones and tusks of all sorts of creatures, minerals, barks, grasses, drugs, fruits, and gums in bewildering completeness. Some of the species are so rare that they are kept, like diamonds, in little folded papers. The grotesque nature of some of the materials there collected prompted the inquiry:—"How can you ever want such things as shark's teeth or rhinoceros horn?" "Ah, that question shows that you do not know what queer things electricians use," replied our modern Virgil. "During the progress of the experiments with the incandescent electric light, for instance, nearly everything one can think of was tried as a primary material from which to form the delicate carbon filament whose incandescence is the source of the light. Finally, as perhaps you know, shreds of one particular variety of bamboo were found to give the most gratifying results; and there, by the way, you can see a few bales of the very reeds from which these strips are cut. Again, the delicate needle, which, affixed to the underside of the vibrating diaphragm of the phonograph, indents the smooth revolving surface of the waxen cylinder, had to be formed of some material possessing peculiar properties of elasticity and rigidity. Scores of the most unlikely substances, both organic and inorganic, natural and artificial, were tried before the right one was hit upon. And so it goes with all the little details of electric appliances."—*Court Journal*.

**MACHINERY AND THE CONDITION OF WOMEN.**—To the progress of invention, more than to all other causes combined, is due the important sociological fact that the condition of women has been vastly improved during the

last four or five decades. Invention has relegated the coarser, and harder work of women to machinery, and has opened up new and pleasant avenues of profitable employment for them. Witness the telegraph, the telephone, and type-writing machines by which hundreds of thousands of women and girls earn their living. The movement is still onward and upward.—*Inventive Age.*

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**THE PRODUCTION OF IVORY.**—There are annually killed in Africa a minimum of 65,000 elephants, yielding a production of a quantity of raw ivory, the selling price of which is some £850,000. This quantity is shipped to various parts of the world—to the American, the European, and the Asian markets. A large quantity is, however, kept by the native princes of Africa, who are very fond of—and, as a rule, very good judges of—ivory. The production out of Africa is only insignificant, and India, Ceylon, and Sumatra together produce only some 20,000 kilogs. per year. India is the largest consumer of ivory, and China is also a good market.—*Industries.*

**THE SOURCES OF BEAUTIFUL COLORS.**—The *American Druggist* has formulated a list of the choicest colors used in the arts, as follows:—The cochineal insects furnish a great many of the very fine colors. Among them are the gorgeous carmine, the crimson, scarlet carmine, and purple lakes. The cuttlefish gives the sepia. It is the inky fluid which the fish discharges in order to render the water opaque when attacked. Indian yellow comes from the camel. Ivory chips produce the ivory black and bone black. The exquisite Prussian blue is made by fusing horses' hoofs and other refuse animal matter with impure potassium carbonate. This color was discovered accidentally. Various lakes are derived from roots, barks, and gums. Blue-black comes from the charcoal of the vine-stalk. Lampblack is soot from certain resinous substances. Turkey-red is from the madder plant, which grows in Hindostan. The yellow sap of a tree of Siam produces gamboge; the natives catch the sap in coconut shells. Raw Sienna is the natural earth from the neighborhood of Sienna, Italy. Raw umber is also an earth found near Umbria and burnt. India ink is made from burnt camphor. The Chinese are the only manufacturers of this ink, and they will not reveal the secret of its manufacture. Mastic is made from the gum of the mastic tree, which grows in the Grecian Archipelago. Bister is the soot of wood ashes. Very little real ultramarine is found in the market. It is obtained from the precious lapis-lazuli, and commands a fabulous price. Chinese white is zinc, scarlet is iodide of mercury, and native vermilion is from the quicksilver ore called cinnabar.

**AREAS IN SOUTH AMERICA.**—According to calculations recently made the areas of the several South American States are as follows, the latest edition of Stieler's Atlas, compiled from the most recent information obtainable, being used as a basis:

	Square Kilometers.		Square Kilometers.
Brazil.....	8,361,350	Peru.....	1,137,000
French Guiana...	78,900	Bolivia.....	1,334,000
Dutch Guiana...	129,100	Chili.....	776,000
British Guiana...	829,500	Argentina.....	2,769,400
Venezuela.....	1,043,900	Uruguay.....	178,700
Colombia.....	1,803,100	Paraguay.....	253,100
Ecuador.....	299,600		
Total.....			17,813,950

From which it appears—and this is especially interesting just now—that Brazil represents a superficies only short by 545,625 square kilometers of being one-half the total area of the vast South American continent.

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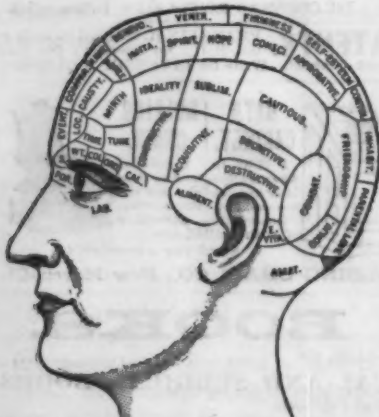
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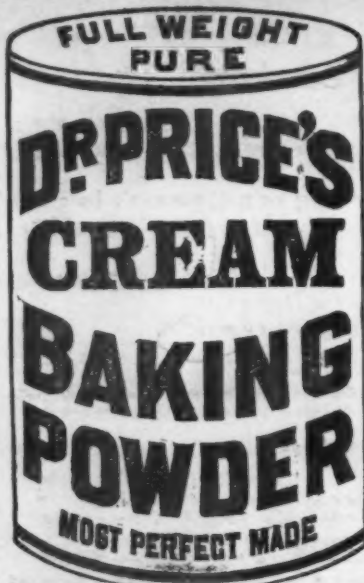
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